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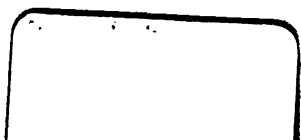
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War Department Appropriation Bill, 1923

HEARINGS

BEFORE THE

SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
UNITED STATES ^{CONGRESS,} SENATE

SIXTY-SEVENTH CONGRESS

SECOND SESSION

ON

H. R. 10871

A BILL MAKING APPROPRIATIONS FOR THE MILITARY AND
NONMILITARY ACTIVITIES OF THE WAR DEPARTMENT
FOR THE FISCAL YEAR ENDING JUNE 30, 1923,
AND FOR OTHER PURPOSES

Printed for the use of the Committee on Appropriations



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1922

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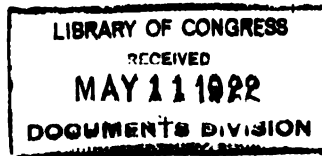
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10.5/25/22

WAR DEPARTMENT APPROPRIATION BILL, 1923.

WEDNESDAY, APRIL 5, 1923.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10.30 o'clock a. m.

Present: Senators Wadsworth (chairman), Jones of Washington, Spencer, Hitchcock, and Harris.

The subcommittee thereupon proceeded to the consideration of the bill (H. R. 10871) making appropriations for the military and non-military activities of the War Department for the fiscal year ending June 30, 1923, and for other purposes.

**STATEMENT OF BRIG. GEN. H. M. LORD, UNITED STATES ARMY,
CHIEF OF FINANCE.**

OFFICE OF THE SECRETARY.

PRIVATE SECRETARY TO SECRETARY OF WAR.

General LORD. Mr. Chairman, the first item in the bill is personnel for the office of the Secretary of War. Mr. Scofield, the assistant and chief clerk, is here, and represents the Secretary. In that personnel the Secretary's office is willing to accept the findings of the bill as it passed the House, with one exception. The Secretary of War has asked me personally to present to the committee his desire that the amount carried in line 8 of the bill, page 2, for private secretary to the Secretary, be increased from \$2,500 to \$3,000, an increase of \$500, which is the only increase asked in this personnel.

I can speak for myself, from most intimate personal knowledge, of the demands made upon the man occupying this position. It is a position that has developed and expanded in importance, until to-day there is thrown upon the man occupying that position great administrative responsibility. It requires a rare man; and certainly the \$3,000 that is asked is small enough for the responsibilities that he carries. The Secretary is very much concerned and interested that that increase be made by the committee.

Mr. Scofield can reply for any other items in that paragraph, and he also appears for the contingent expenses of the War Department on the next page, for postage, stationery, printing, and binding.

Senator WADSWORTH. Do you care to ask any questions about page 2. Senator SPENCER?

Senator SPENCER. No.

Senator WADSWORTH. I think the Secretary has written a letter, has he not, concerning the salary of his private secretary?

General LORD. Yes, sir. I have a copy of it here. It was sent to Senator Wadsworth, I believe.

Senator WADSWORTH. I think it would be wise to put the letter in the record, so that members of the committee can understand the situation from the Secretary's viewpoint.

Senator SPENCER. To whom is it addressed?

General LORD. To Senator Wadsworth.

(The letter referred to is as follows:)

MARCH 28, 1922.

HON. JAMES W. WADSWORTH, JR.,

Chairman Subcommittee on War Department Appropriations,

Appropriations Committee, United States Senate.

MY DEAR SENATOR WADSWORTH: In the War Department estimates for appropriation of salaries for the office of the Secretary of War for the fiscal year beginning July 1 next there was an item asking for the increase of \$500 in the salary of the private secretary to the Secretary of War. The present salary of this position is, and has been for some years, \$2,500, and the estimate asked that the salary be made \$3,000 per annum. The appropriation bill as reported by the House committee did not allow this increase.

The position of private secretary to the Secretary of War is a responsible position and requires the services of a competent and able man. His relationship to the Secretary is of a very personal and confidential nature. He bears a heavy responsibility, and the satisfactory discharge of his duties requires an intimate knowledge not only of the policies of the head of the department but of the business of the department and each of its subordinate bureaus and offices, a knowledge which can be secured and maintained only by a very high degree of ability and by unremitting industry. In view of the exacting requirements of this position, and not withstanding the necessity for rigid economy at the present time, I deem the present salary so inadequate as to warrant the presentation in a special estimate of the need for and justice of an increase of \$500, and urge its prompt and favorable consideration.

I am asking General Lord, Budget officer of the War Department, to see you personally and represent me in presenting the merits of this case.

Sincerely yours,

JOHN W. WEEKS,
Secretary of War.

STATEMENT OF MR. JOHN C. SCOFIELD, ASSISTANT AND CHIEF CLERK, WAR DEPARTMENT.

COMPARISON OF SALARIES OF TELEPHONE OPERATORS.

Mr. SCOFIELD. Mr. Chairman, there is perhaps one other matter that we should like, in addition to the action of the House.

On page 43 of the hearings, I think, attention is called to an inequality existing in the pay of our telephone operators as compared with the pay which the Navy telephone operators get. It is fully set forth on page 43 of the hearings. The War and Navy telephone offices have been combined, and when we combined them our operators were getting considerably less pay than the Navy operators, and that condition has continued. The facts are fully set forth in the hearings on that page.

Senator HARRIS. Just how much difference is there?

Mr. SCOFIELD. Ours are getting \$1,080—\$840 plus the bonus—while the Navy force gets \$1,340, a difference of \$260.

Senator WADSWORTH. Of course, these people are under the civil service, are they not?

Mr. SCOFIELD. They are all under the civil service.

Senator WADSWORTH. What does the pending reclassification bill do with them?

Mr. SCOFIELD. Which bill do you mean?

Senator WADSWORTH. There is a reclassification bill, as I recollect, for the civil service.

Mr. SCOFIELD. Oh, the Sterling-Lehlbach bill? I can not say off-hand, but it gives them more than the War Department employees are now getting.

Senator WADSWORTH. Do you not think, Mr. Scofield, that a matter of that sort—the equalization and classification of salaries of employees—should be carried in general legislation, instead of constantly patching it in appropriation bills?

Mr. SCOFIELD. There is no doubt about. We were constrained to the low salary by a provision which has been for years in the legislative bill, limiting the salaries of telephone operators, unless especially excepted, unless they are specifically given a higher salary. The Navy Department were affected in the same way, but they found an ingenious method of avoiding that limitation.

Senator WADSWORTH. You have not had occasion to look up, then, that reclassification bill?

Mr. SCOFIELD. I will look it up and see just exactly what telephone operators are given by the reclassification bill.

NOTE.—H. R. 8928 provides salary range of \$1,080 to \$1,200 for telephone operators.

Senator WADSWORTH. That bill has been reported by the Civil Service Committee of the Senate, and has been referred to the Committee on Appropriations for consideration by that committee of the amounts. In all probability there will be action on that bill.

Mr. SCOFIELD. I hope so.

Senator WADSWORTH. A thing of this sort ought to be straightened out.

Mr. SCOFIELD. It ought to be straightened out in some way, and of course I think it is very much better to straighten it out through the reclassification bill; but if it is not sure to pass, I should like to have it straightened out here.

Senator HARRIS. They seem to be getting less than the private telephone companies pay their operators.

Mr. SCOFIELD. They are, as a matter of fact, and they are all experienced operators of many years' service.

Senator WADSWORTH. Your request, then, was for what?

Mr. SCOFIELD. We asked that there be some equalization. We should like to have them get as much as the Navy operators get. They are working side by side, at the same switchboard, doing precisely the same service. Eleven hundred dollars plus the \$240 is what we would like to have them get, which is not higher but is rather less than the local companies are paying for similar services.

Senator HITCHCOCK. How many hours a day do they work?

Mr. SCOFIELD. They work eight hours a day.

Senator SPENCER. You paid a number of them last year out of the lump sum, did you not?

Mr. SCOFIELD. Yes.

Senator SPENCER. You had only two on the regular roll?

Mr. SCOFIELD. Only two on the regular roll.

Senator SPENCER. And now you are taking the thirteen and putting them all on the regular roll?

Mr. SCOFIELD. Yes; putting them all on the regular roll.

Senator SPENCER. How much did they get out of the lump sum last year?

Mr. SCOFIELD. They got this same figure.

Senator SPENCER. Eight hundred and forty dollars, plus the bonus?

Mr. SCOFIELD. Yes, sir.

Our salaries here are exactly what we are paying now, throughout our estimate, with the single exception of the estimate for \$500 increase for the private secretary. I hope this increase will be granted. It is richly merited, in my judgment. We have asked for no other increase; and in the House, in fact, we asked them to reduce the estimate from what we had originally submitted by five or six thousand dollars. Between the time when we submitted the estimate and the time when we had the hearings we saw where we could make a reduction, and we asked the House to make it, and it was made. At the present time the civilian personnel of the office of the Secretary of War is only 25 per cent over the pre-war force.

REDUCTION OF CIVILIAN EMPLOYEES.

Senator SPENCER. That is for the whole department?

Mr. SCOFIELD. No; the Secretary's office. The entire department force in Washington and outside is now less than the pre-war force by thirty-three hundred and some. If you take into consideration the new forces which have been added, namely, the Air Service, which was increased from 210 before the war to about thirty-five or thirty-six hundred, and the Chemical Warfare Service, of about 1,200, which is entirely new, the entire force of the civilian employees of the War Department throughout the world, in Washington and elsewhere, is now some 3,300 less than it was before the war. Not considering those, we are but slightly above the pre-war figure—2,700, I think, or something like that.

Senator SPENCER. Mr. Scofield, how is that possible? What causes that reduction below the pre-war number?

Mr. SCOFIELD. Main strength, largely; better organization, centralization, and so on.

Senator HITCHCOCK. Is that in Washington?

Mr. SCOFIELD. Everywhere.

Senator HITCHCOCK. Is the force in Washington reduced below what it was before the war?

Mr. SCOFIELD. No, sir; the force in Washington before the war was around 3,000. It grew to 37,406 at the signing of the armistice. To-day it is 5,593.

Senator HITCHCOCK. So that the reduction as compared with the prewar days is altogether outside of Washington?

Mr. SCOFIELD. Yes; we are above the pre-war number in Washington. We have 5,593 in Washington as against about 3,000. We have about 2,600 more than we had before.

Senator HITCHCOCK. How was this reduction outside of Washington accomplished?

Mr. SCOFIELD. By orders to reduce.

Senator HITCHCOCK. At department heads and division posts and so on?

Mr. SCOFIELD. Throughout all the posts. There was an order issued to get down so much before a certain date.

General LORD. The force was reduced by order of the Secretary of War in certain percentages. At a certain time they were ordered to be reduced by such a percentage over their entire force.

Senator WADSWORTH. Mr. Scofield, did you state the total force at the time of the armistice all over the country?

Mr. SCOFIELD. No; I did not state that, but I can give you that.

Senator WADSWORTH. Have you it with you?

Mr. SCOFIELD. November 11, 1918, the total of War Department civilian employees in the District of Columbia and outside was 251,634.

Senator SPENCER. Have you the totals before the war and now?

Mr. SCOFIELD. The pre-war force was 45,911. We can not bring it down to date outside of Washington; we do not get those returns until about the middle of the month. It is now less than 48,691—that was the number February 28, 1922. That is an increase of 2,780 over the prewar force. To offset that, I have suggested that we consider that the Chemical Warfare Service, entirely new, is 1,256, and the Air Service, which is practically new, is 4,084, a total of 5,340 absolutely all new except 210 that were in the Air Service before the war.

Senator HITCHCOCK. You say the number employed in the Chemical Warfare Service is twelve hundred and some?

Mr. SCOFIELD. Twelve hundred and fifty-six.

Senator HITCHCOCK. Those are all civilians, are they?

Mr. SCOFIELD. Those are civilians throughout the country, in Washington and elsewhere.

Senator WADSWORTH. Most of the civilians in the Chemical Warfare Service are at the Edgewood Arsenal?

Mr. SCOFIELD. Yes, sir; very largely.

Senator WADSWORTH. And most of the civilians in the Air Service are at Dayton?

Mr. SCOFIELD. At the Dayton Field; yes.

Senator SPENCER. Then, when you state that the present force is approximately 3,300 less than before the war, you mean exclusive of the Chemical Warfare Service and the Air Service?

Mr. SCOFIELD. What I mean is that we have 2,780 more employees than before the war, but if you take into consideration the fact that 5,130 people have been added for new services we have 3,350 less.

Senator SPENCER. I see.

Mr. SCOFIELD. Since the armistice our force in Washington has been reduced over 85 per cent.

Senator HITCHCOCK. Mr. Chairman, now that we have gotten rid of poisonous gases in warfare, I suppose we will get rid of all this Chemical Warfare Service.

Senator WADSWORTH. That remains to be seen.

Mr. SCOFIELD. I presume it will be reduced.

Senator WADSWORTH. Now we might proceed to the discussion of the paragraph headed "Contingent expenses."

Mr. SCOFIELD. Mr. Drane, the chief of our supply division, is here, and I will ask you to hear him on that if you will.

Senator WADSWORTH. Very well.

**STATEMENT OF MR. ALBERT G. DRANE, CHIEF OF SUPPLY
DIVISION, WAR DEPARTMENT.**

CONTINGENT EXPENSES.

Mr. DRANE. Mr. Chairman, the House bill gives us for contingent expenses \$95,000, the amount we asked for. It is very likely, however, that we can squeeze through with that amount.

Senator WADSWORTH. There are no changes that you have to suggest in the language of the paragraph?

ALTERATIONS AND INSTALLATIONS IN GOVERNMENT-OWNED BUILDINGS.

Mr. DRANE. No, sir. The new language that I suggested they very kindly put in in the House, allowing us to install certain things in Government-owned buildings—toilets, etc.

Senator SPENCER. That is \$55,000 less than you had last year—less than you spent?

Mr. DRANE. No; I did not spend all my appropriation last year.

Mr. SCOFIELD. It is \$55,000 less than the appropriation.

Senator HARRIS. Will that reduction interfere with any of the work that you want to do that seems necessary?

Mr. DRANE. No, sir; I think not. I am satisfied unless something unforeseen should come up.

Senator WADSWORTH. What was your estimate for 1923?

Mr. DRANE. \$95,000.

Mr. SCOFIELD. It is a reduction of \$55,000 over the current appropriation.

Mr. DRANE. The current appropriation is \$150,000.

STATIONERY.

Senator WADSWORTH. Have you any observations to make about the next item, stationery?

Mr. DRANE. The House reduced our estimate by \$5,000. That bill gave us \$40,000. While I have not spent a great deal of this year's appropriation, it is due to the fact that we have salvaged so much stationery, and this appropriation now is running a little short; and stationery, too, is at least 25 per cent higher than it was before the war.

Senator SPENCER. You mean the price is now 25 per cent higher than before the war?

Mr. DRANE. Yes, sir.

Senator HARRIS. It is a little lower than it was last year.

Mr. DRANE. A trifle lower than it was last year. I have some figures in regard to the prices of stationery at the present time, but I think we can get through with \$40,000.

**FURTHER STATEMENT OF MR. JOHN C. SCOFIELD, ASSISTANT
AND CHIEF CLERK, WAR DEPARTMENT**

POSTAGE STAMPS.

Senator WADSWORTH. What about the next item, postage stamps?

Mr. SCOFIELD. The House gave us \$375. I think we can get along with that amount.

Senator WADSWORTH. I think you asked for \$375.

Mr. SCOFIELD. Yes; that was the estimate. The appropriation was \$500 this year. We asked for \$375.

Senator WADSWORTH. You have no observations to make on that?

Mr. SCOFIELD. No, sir; we can get along with that, I think.

Senator HITCHCOCK. How do you happen to use postage stamps?

Mr. SCOFIELD. We use them for foreign service, very largely in exchanges of publications. An appropriation has been made for this purpose for thirty-odd years, to my personal knowledge.

PRINTING AND BINDING.

As to printing and binding, the current appropriation is \$450,000. We asked for \$300,000, and the House gave us \$275,000. They cut down the amount that was allotted as available to the engineers \$5,000 from the current appropriation.

Senator WADSWORTH. Was that for map printing?

Mr. SCOFIELD. For everything that the engineers have.

As to that reduction from our estimate of \$300,000 to \$275,000, it is difficult to say whether we can get along with it or not. The principal user of the War Department appropriation for printing and binding is The Adjutant General, and it depends very largely upon his requirements. In order to keep within \$275,000 he will have to trim pretty closely. There are so many unexpected conditions arising in The Adjutant General's office requiring various publications, and the issuance of orders, and things of that kind, that I am not sure whether he can get along and keep within it or not.

Senator HITCHCOCK. I do not quite understand how the printing and binding is done for the department. Do you send it up to the Public Printer?

Mr. SCOFIELD. We do.

Senator HITCHCOCK. And he charges it to your department?

Mr. SCOFIELD. This is the allotment which is made by Congress for printing, which is required to be done at the Government Printing Office, with certain exceptions which are authorized by law.

Senator HITCHCOCK. Then you pay the Public Printer for it?

Mr. SCOFIELD. That is it exactly. He charges us what he wants to, and we pay it.

Senator HARRIS. You think you ought to have \$300,000, do you not?

Mr. SCOFIELD. Unless The Adjutant General is satisfied with this amount, I think it would be a safe thing to increase it. I am not asking for the increase.

STATEMENT OF COL. ROBERT C. DAVIS, ACTING THE ADJUTANT GENERAL, UNITED STATES ARMY.

Senator HARRIS. General Davis, what do you think of this matter?

Colonel DAVIS. I think the amount should be increased to the amount that was asked for—\$300,000. The whole system of furnishing pamphlets to the service has been revised, and they are now using a loose-leaf system which was started by my predecessor, General Harris. Under that system, for instance, the Army Regulations are put out in a series of pamphlets. The idea is that all the

different separate manuals which were issued to the service would be combined in Army Regulations, and they would be put out in a system of pamphlets. Then, when any particular chapter had to be revised, you would not have to issue a whole new book, but you simply would take out of the loose-leaf binder one pamphlet, revamp it, and print it. It is claimed that will in the end make for a very great saving.

Following that same plan, there is to be a system of training pamphlets that are to be issued to the service. Naturally, after a war like the great World War, these different manuals, drill regulations, and pamphlets for the use of the different arms have to be all revised. I understand that the Army Regulations will be issued in approximately 600 pamphlets. One hundred and forty have been issued to the service. There are 80 that are now with the Public Printer, and 150 are being prepared in the staff. They are to come out during the next fiscal year.

In addition to that, of the training regulations there are about 700 training pamphlets that are to be issued. They have sent out so far only three. The different chiefs of branches are having boards that are working up these new training manuals. They are based on our experiences in the war, and they are absolutely necessary for the instruction not only of the regular service but also of the National Guard and the reserve, and they will have to be issued to the reserve. The National Guard repay us for the manuals that are issued to them, making a revolving fund, so that does not increase or decrease the appropriation, but the reserves have to have the manuals issued to them from this appropriation. As I understand, no manuals have been issued so far to the reserve. It is contemplated in the estimate that during the coming year quite a number of manuals will be issued to them, so that I think the appropriation of \$300,000 asked for should be made.

Senator HITCHCOCK. Why have you so many as 700 pamphlets?

Colonel DAVIS. Some of them are very small, sir. They are not on related subjects, so that they are gotten out, for instance, to explain the use of an automatic, or the use of a machine gun, or the use of different arms. When they become obsolete and we get a new arm it is very easy to take out the pertinent pamphlet and either abolish it or submit another one. It is claimed to make for economy in the end.

ALLOTMENT TO THE CHIEF OF ENGINEERS FOR PRINTING AND BINDING.

Senator WADSWORTH. I notice here that the proviso says that \$45,000 shall be available for printing and binding under the Chief of Engineers. Over on pages 60 and 61, under the heading "Military surveys and maps," in the Engineer Department, we find this language:

For the execution of topographic and other surveys, the securing of such extra topographic data as may be required, and the preparation and printing of maps required for military purposes, to be immediately available and remain available until December 31, 1923. \$25,000.

I assume that this \$45,000 on page 4 which is set aside for the use of the Chief of Engineers will be used in part, at least, for the printing of maps?

Mr. SCOFIELD. I think not. I think it is mostly for the printing of river and harbor matters.

General LORD. Mr. Chairman, the Comptroller General has decided that the only appropriation in the Army bill that is available for the procurement and printing of maps is the specific appropriation later on in the bill to which you refer: that this money under "printing and binding" is not available and can not be legally expended for that purpose.

Major F. W. BROWNE. If I may make a statement in that connection the bulk of this amount of \$45,000 is for the printing of the annual report of the Chief of Engineers, and also for the printing of these numerous reports of examinations and surveys of rivers and harbors which are required by Congress.

Mr. SCOFIELD. And it includes no maps that can not be printed at the Government Printing Office.

Senator WADSWORTH. I see. The annual report of the Chief of Engineers, of course, is very largely taken up with river and harbor reports; is it not?

Major BROWNE. Almost entirely so.

Senator HARRIS. General Davis, if we increase the amount to the \$300,000 asked for, then it is all right to increase the amount down below, available for engineers, from \$45,000 to \$50,000; is it?

Mr. SCOFIELD. Yes; that would be all right, Senator.

Colonel DAVIS. Yes, sir.

Senator HARRIS. That would not cripple you?

Mr. SCOFIELD. But I do not know whether the engineers can get along with the \$45,000 or not.

Senator HARRIS. I asked you if it was all right, if we gave you \$300,000, for \$50,000 of it to go to the engineers instead of \$45,000?

Mr. SCOFIELD. Yes; that is, provided the engineers can not get along with the \$45,000.

Senator HARRIS. Yes; it says "not exceeding" that amount.

Mr. SCOFIELD. Mr. Chairman, I should like to say, as an indication that we are careful with appropriations, that we had an appropriation of \$450,000 last year. We did not spend it all, and we turned back into the Treasury—

Senator WADSWORTH. Just a moment, Mr. Scofield. Are you speaking now of the current year, or last year?

Mr. SCOFIELD. I am speaking of the year that is ended, the fiscal year 1921. Of course, we can not tell about the current year yet.

Senator WADSWORTH. Yes.

Mr. SCOFIELD. We had \$450,000 appropriated, and we had cash sales and reimbursements amounting to \$43,000, making the total amount available \$493,252.54, and we actually spent \$397,420.24, and turned back into the Treasury the balance, which amounted to \$95,832.30.

Senator WADSWORTH. Mr. Scofield, how are you running this year with an appropriation of \$450,000?

Mr. SCOFIELD. We are running safely at the present time. This matter which General Davis has alluded to it causing, and will in the preliminary stages cause, a little extra expense until the new system which is being inaugurated is fully established; and after that it is going to result, as General Davis has said, in a considerable saving.

Senator HITCHCOCK. What was the pre-war expense for that item?

Mr. SCOFIELD. In 1916 the appropriation was \$200,000. In 1917, of course, here was an increase. We spent \$707,395.87, and we are asking for \$300,000 in this year's estimate.

Senator HITCHCOCK. Can you explain why the amount is so much larger, Mr. Scofield? What reason do you suppose has caused this considerable increase?

Mr. SCOFIELD. Oh, it is the war conditions. You see, there is a larger Army, and the results of the war made necessary a great many changes in manuals, in drill regulations, and in the Army Regulations themselves. The Army was reorganized, and new conditions produced the necessity for different regulations, different methods of organization. All those things had to be printed, including an enormous number of blank forms.

Senator HITCHCOCK. Do you suppose the rate charged you at the Printing Office is higher?

Mr. SCOFIELD. Oh, yes; the rate is higher. There is an increase in the price of materials, and of course in the labor involved.

ALLOTMENT TO CHIEF OF ENGINEERS FOR PRINTING AND BINDING.

Major BROWNE. May I make one statement in response to an inquiry of Senator Harris made a moment ago as to the allotment to the Chief of Engineers? Our records show that the Chief of Engineers stated that \$45,000 would be sufficient for his requirements.

Senator WADSWORTH. Are there any other questions on that paragraph? If not, what do you care to take up next, General Lord—contingencies?

General LORD. Colonel Davis, representing the Office of The Adjutant General, will present that matter to you.

Major BROWNE. On page 7, the first item, "Contingencies, Headquarters of Military Departments," etc.

FURTHER STATEMENT OF COL. ROBERT C. DAVIS, ACTING THE ADJUTANT GENERAL, UNITED STATES ARMY.

CONTINGENCIES, HEADQUARTERS OF MILITARY DEPARTMENT.

Colonel DAVIS. Mr. Chairman, the amount estimated and asked for was \$6,000.

Senator WADSWORTH. That is under the heading "Contingencies, Headquarters of Military Departments," etc.?

Colonel DAVIS. Yes, sir; and the House bill appropriates that amount, which is the amount that is desired and is believed to be necessary for that purpose. Prior to the war the amount was annually about \$7,500, so that this is a reduction in the amount that was asked for prior to the war.

Senator HARRIS. You are reducing it although the prices have gone up?

Colonel DAVIS. Yes, sir; and it is believed to be sufficient for the purpose.

Senator HARRIS. \$6,000?

Colonel DAVIS. Yes, sir.

Senator WADSWORTH. That is a good showing. What is your next item?

SALARIES, THE ADJUTANT GENERAL'S OFFICE.

Colonel DAVIS. The next item is the clerical force of The Adjutant General's office, page 13. The amount which was estimated for and which was appropriated by the House is \$1,156,770. This makes quite a reduction in the clerical force; but the Secretary is of the opinion that this force is sufficient, and I therefore do not ask for anything in addition.

Senator SPENCER. General, I notice in that item for the completion of work of furnishing statements of service to the adjutant generals of the States that the House increased the amount from \$100,000 to \$202,000.

Colonel DAVIS. Yes, sir.

Senator SPENCER. That \$202,000 is really necessary to give that information, is it?

Colonel DAVIS. That is not sufficient, Senator. On April 3, in the Senate, you passed a bill appropriating \$250,000 for this purpose.

Senator SPENCER. That is right.

Colonel DAVIS. The amount which was originally in the bill, Senate bill 2992, was \$350,000; but on the presentation of a letter from the Secretary of War on the subject, asking that certain of the data that it was suggested be prepared for historical purposes be cut out of the bill, the amount was reduced to \$250,000, which was estimated for, and which I believe is needed to complete the work which it is contemplated will be done. That is based on actual experience in the past on this work and on test cases.

Senator SPENCER. Of course, the appropriation of whatever is required to complete that work is necessary, because many States have their whole bonus depending upon those records.

Colonel DAVIS. Yes, sir.

Senator SPENCER. In Missouri, for example, unless we can get the records of the ex-service men, the bonus, which is now practically payable, can not be paid.

Colonel DAVIS. Yes, sir; and, for instance, this morning a gentleman from Missouri came into the office——

Senator SPENCER. Colonel Lowe?

Colonel DAVIS. Yes, sir; Colonel Lowe. He came into the office to see me in connection with going to the World War Division to look up the records of certain of those officers and men for whom we have not as yet furnished a complete record.

They have furnished the records of 3,724,150 enlisted men. There are outstanding, to be furnished, the records of 132,000 officers and 340,000 men, making a total of 472,000. Naturally in this work they took first the cases that did not have very many complications. They have flagged in the records those that have not been completed. Of course, some of these cases will require considerable research to get the complete and accurate data, which, therefore, would increase the cost a bit over what it was before; but the estimate is that this work can be done for \$250,000. I think it can, sir.

Senator HARRIS. That is your estimate?

Colonel DAVIS. Yes, sir.

Senator HARRIS. You are satisfied with \$250,000?

Colonel DAVIS. Yes, sir.

Senator HITCHCOCK. General, can you give us the prewar expense of the Adjutant General's office, which is now \$1,156,770?

Colonel DAVIS. Yes, sir; I will insert that in the record.

NOTE.—The prewar expenses were \$852,650.

I recall that in the clerical force prior to the war there were 583 clerks, as opposed to the 788 asked for in this appropriation.

There are at present in The Adjutant General's office 1,053 clerks, so that we are cutting down from 1,053 clerks by June 30 to 788 clerks for the next fiscal year. That is not the subclerical force—just the clerical force. The apex of the clerical force of The Adjutant General's office was reached in October, 1919, because naturally that office had its maximum work after the armistice. At that time they had in the office 4,658 clerks. Of course, there are now many new activities which the office has to handle. For instance, all the work connected with the World War division, which has about 400 clerks, is absolutely new work. In addition to that you have the work connected with the Reserve Army, which is an important division; and as that Army increases and begins to function you will necessarily have to have a larger division to handle it. You have the work connected with the selective service records division, the work of which is entirely new since the war; so, therefore, the clerical force that is asked for in this estimate is only practically 200 more than we had prior to the war.

Senator HARRIS. General, how is the business transacted? Will that be very much heavier than it was before the war, or not?

Colonel DAVIS. The total amount of business in the office now is about five times what it was prior to the war. Some of it will naturally begin to decrease, I hope; but, of course, after a war of the size of the World War, for a number of years there is a great deal of correspondence that will keep up more or less at the same level.

Senator HARRIS. On a 50 per cent increase of clerks you are doing five times the business? That is the way it is working?

Colonel DAVIS. Yes, sir.

Senator HITCHCOCK. May I get you to recapitulate there? How many clerks were there prior to the war? You went a little too fast for me.

Colonel DAVIS. I can give it to you in dollars, if you prefer to have it that way.

Senator SPENCER. We would rather have it in numbers.

Colonel DAVIS. Before the war there were 583 clerks. This does not include the subclerks and messengers, and people of that kind. At the apex, in October of 1919, there were 4,658 clerks. At the present time there are 1,053 clerks. This estimate asks for 788 clerks.

Senator HITCHCOCK. That is quite a reduction—788.

Senator HARRIS. Will it cripple you to get rid of some of the clerks that are there now? What are they on?

Colonel DAVIS. They will have to be taken from both the statutory roll and the lump-sum appropriation, I think.

Senator HARRIS. What work are they on? Is it going to cripple you to take the clerks away from you? That is what I was driving at.

Colonel DAVIS. There will simply have to be a reduction in the different divisions, Senator. This amount which is asked for is the amount which the Secretary and the Budget officer have authorized to ask for.

Senator HARRIS. Mr. Chairman, at the last committee hearing we had it was brought out that under the order of the President, I believe, the chiefs of bureaus can not ask for more than the Budget recommends; but if a member of the committee asks one of the chiefs whether he can get along with that amount, he has a perfect right to say that it is not enough. I thought I would mention that for the benefit of General Davis. If there is any item which we ask you about, you are not compelled, as I understand, to hold to what the Budget allowed.

Colonel DAVIS. I have just taken charge of the office, but I am satisfied to endeavor to organize the office with this number of clerks.

FURNISHING RECORDS OF PERSONS WHO SERVED DURING THE WORLD WAR.

Senator HARRIS. How many clerks are there on the World War records now? Are they still on that work?

Colonel DAVIS. The World War division has 368 clerks at the present time, sir.

Senator HARRIS. Those clerks will all go off under this appropriation June 30, will then not—the last appropriation?

Colonel DAVIS. No, sir; my idea will be to try to cut out wherever I can any overhead and make a proportionate deduction in the different divisions of the office and a consolidation of certain of the divisions.

Senator HARRIS. Can you carry on the work for the \$250,000? Can you get along all right?

Colonel DAVIS. Yes, sir.

Senator WADSWORTH. Colonel, you are doubtless aware that there is a bill pending in Congress, introduced in the Senate by Senator Cummins, which has been reported to the Senate by the Military Committee with an amendment, which strikes out certain provisions of the bill and reduces the appropriation. Your predecessor, General Harris, appeared before the Military Committee and persuaded the committee that that amendment might be adopted with advantage. As I recollect it, the bill now is confined to an appropriation to complete the records of the individual soldiers, but as originally drafted and introduced and before it was amended it provided not only for the records of the individual soldiers but also in effect a history of the organization in which each soldier served.

Colonel DAVIS. Yes, sir.

Senator WADSWORTH. That was the part that was stricken out. There is going to be a good deal of opposition on the floor of the Senate to the striking out of that part.

Colonel DAVIS. Yes, sir.

Senator WADSWORTH. According to your predecessor, it would cost a great deal more than \$250,000 if that were done.

Colonel DAVIS. Yes, sir.

Senator WADSWORTH. The House, as I gather, appropriated \$202,000 to complete the records of individual soldiers; is that correct?

Colonel DAVIS. That is correct. I read in the Congressional Record, Mr. Chairman, the discussion in connection with it, and the original amount which was in the House bill at the time was \$100,000. The point was brought out by Mr. Hull that the amount that was

necessary was \$225,000 to complete the records, \$26,000 to furnish the place of death of the men who had been killed in action. That made \$251,000, and then there was \$51,000 which was to complete this historical record, making a total of \$302,000.

On a point of order, these increases were thrown out, so it came back to the original proposition of completing the records of the individuals at \$100,000. It was then moved that that amount be changed to \$202,000, undoubtedly through a mistake, and \$202,000 was passed.

Senator WADSWORTH. Your position is that instead of \$202,000 it will require \$250,000?

Colonel DAVIS. \$250,000, which is the amount estimated. Of this, \$225,000 is for completing the furnishing to the States of the records of the individuals, and \$25,000 is for the purpose of furnishing to the States a statement showing the place and date of death of each officer or man and the cause, just exactly the same as in the bill which was passed in the Senate on April 3 and introduced by Senator Cummins.

Senator HITCHCOCK. I would like to ask why it costs so much to ascertain the records of some 470,000 men? Are the records in confusion? I understand you have ascertained the records of all except about 470,000; was it not 470,000?

Colonel DAVIS. Yes, sir.

Senator HITCHCOCK. Four hundred and seventy-two thousand. Now, to find the records of those remaining 472,000 it is going to cost \$250,000?

Colonel DAVIS. It will cost \$225,000, and the additional \$25,000 is for the purpose of ascertaining other data in connection with the death and the place of death. The reason is, that in doing this work originally they had a certain clerical force, they became efficient, and they were accustomed to the work and it became more or less of a routine, so that when you got through you had a certain amount of money expended for this purpose. Finally, with a view of retrenchment, a certain amount of money—if I remember, \$93,000—was not used, although still available, and this work was not completed. Now, to complete this work you have to reorganize a force and start all over again.

In addition, naturally, the original force in working up these statements passed over those cases which presented difficulties, so that the obtaining of the information now will be more difficult and time-consuming than in the original work.

Senator HITCHCOCK. Each man's record, then, will cost 50 cents, approximately, to look up?

Colonel DAVIS. Yes; and in addition there is the question of the searching, the typewriting, the blank forms, the mailing force, and all that.

Senator HITCHCOCK. Well what condition are the records in which makes that such a difficult matter?

Colonel DAVIS. The records of the individual are assembled together in general in folders called jackets. Now, that has not been entirely completed, and in some places they will have to go to a number of places to get these records, get them in the folders, then to get the data. In other cases there will be a conflict between the

man's record as shown in one place and the man's record as shown in another place, so they may have to go to two or three records, such as organization records, etc., to ascertain the data. These are the remainder of the hardest records.

Senator HARRIS. General Davis's predecessor tried to get this work done last year, and they would not do it.

Senator HITCHCOCK. Outsiders have to come into the department to do that?

Colonel DAVIS. Yes.

Senator HARRIS. And he has to train these people, and it will make it very expensive, and it seems to me he is getting it done very cheaply at 50 cents each. Everything about each man's record has to be gone into. If you look at one of those jackets, Senator, some time when you are up at the War Department you will see it is not an easy job.

General Davis, as I understand about these records, the records of the department are more complete to-day than they were 30 years after the Civil War, are they not?

Colonel DAVIS. I have seen that statement which General Harris made, sir. I am not personally familiar with the Civil War records. I do know that the records of the War Department at the present time in connection with the World War are in splendid condition.

Senator WADSWORTH. Are there any more questions on that subject of the records? What next, Colonel, do you care to take up?

Colonel DAVIS. I understood that was all, Mr. Chairman, that I was to take up this morning, sir.

OFFICE OF THE CHIEF OF FINANCE.

CIVILIAN PERSONNEL.

General LORD. Colonel Clopton will take up the matter of personnel in the office of the Chief of Finance, and in connection with the personnel in that office we would like also to take the field force, which are dovetailed in with the central office force, so that the committee can get a picture of what the work of the Finance Department really is.

STATEMENT OF LIEUT. COL. W. H. CLOPTON.

Senator WADSWORTH. What page is this?

Lieutenant Colonel CLOPTON. Page 24. Mr. Chairman, under the estimate authorized for the office of the Chief of Finance by the Director of the Budget we estimated for the fiscal year 1923 for \$307,010. The estimate was cut in the House to \$285,810, a reduction of \$21,200.

The number of employees originally estimated for totaled 196, exclusive of 6 Red Cross auditors. The Red Cross auditors are charged to the office of the Chief of Finance by law.

The amount allotted in the House bill provides for only 184 employees a reduction of 12, and in viewing the work for the past eight months it is apparent we are not going to get by successfully for the fiscal year with that reduction.

AMOUNT OF MAIL HANDLED.

In order to graphically show the work that is going on in our office this chart has been prepared. The red line represents the incoming pieces of mail per quarter since the 1st of July, 1919, up to the end of March last. The black line represents the reduction in clerical force we have made to correspond with it. That, of course, is just one item. The use of the number of incoming pieces of mail as a measure or guide of the work only illustrates a phase of the work. One piece of mail may occupy a clerk for days, or one clerk may be able to handle 10 pieces of mail a day, etc. I only present the chart to show that since the 1st of July, 1919, we have brought the force from 2,100 employees as of July 1, 1919, to 202 employees as of March 31, 1922. I illustrate with the chart the successive steps taken to reduce the personnel in the office as the work declines.

Senator HITCHCOCK. Those figures are not in the record—the red and black lines. Had you not better read those different dates?

Lieutenant Colonel CLOPTON. I will insert those if you wish.

Senator HITCHCOCK. I think it should appear what they are.

Lieutenant Colonel CLOPTON. Beginning with September 30, 1919—

Total number of incoming pieces of mail during the preceding three months amounted to.....	419,593
For the second quarter ending Dec. 31, 1919, the incoming pieces of mail amounted to.....	369,823
For the quarter ended Mar. 31, 1920.....	294,199
For the quarter ended June 30, 1920.....	258,643
For the quarter ended Sept. 30, 1920.....	175,388
For the quarter ended Dec. 31, 1920.....	129,414
For the quarter ended Mar. 31, 1921.....	117,341
For the quarter ended June 30, 1921.....	120,312
For the quarter ended Sept. 30, 1921.....	84,337
For the quarter ended Dec. 31, 1921.....	72,404
For the quarter just ended, Mar. 31.....	66,874

Senator HITCHCOCK. Now, you are handling about 66,000 letters in about three months?

Lieutenant Colonel CLOPTON. Yes.

Senator HITCHCOCK. That is 700 or 800 a day?

Lieutenant Colonel CLOPTON. Yes. As an additional exhibit to show the comparison of work in the office of the Chief of Finance with the reduction that has taken place in the Army since the beginning of the current fiscal year this chart has been prepared to show the curve of the Regular Army beginning with July 1, the Regular Army at that time being 210,370 strong. By the end of August the Army had reduced to 148,182, due to the appropriation bill providing for only 150,000 men for the regular service.

Since then the Army curve, as you see, drops to March 1, on which date the Army had a strength of 133,236 men.

Senator SPENCER. What is the date of the 210,000?

Lieutenant Colonel CLOPTON. July 1, sir.

Senator SPENCER. 1921?

Lieutenant Colonel CLOPTON. 1921, yes; the beginning of this fiscal year.

Senator SPENCER. That does not include the Philippine Scouts, does it?

Lieutenant Colonel CLOPTON. No, sir; that does not include the Philippine Scouts.

The blue line indicates the number of employees in the office of the Chief of Engineers up to April 1, and is continued as we expect to continue the present number up to July 1 under the present appropriation for the current fiscal year.

During the first four months we had 211 employees in the office and then a gradual reduction until now we are down to 202.

OVERTIME WORK.

This red line represents the overtime we have demanded of the office force in order to keep our work current. The overtime in the office since the 1st of July, 1921, amounts to 639 clerk days. We have had to demand that of the employees in the office in order to keep current and abreast of the work we have to do. It is expected that the red line will continue until the end of the present fiscal year.

Senator HITCHCOCK. And they receive no pay for that?

Lieutenant Colonel CLOPTON. They receive nothing extra for the overtime.

Senator HITCHCOCK. Are all these letters you refer to handled in that office or referred elsewhere?

Lieutenant Colonel CLOPTON. Of course, some of them are letters addressed to us erroneously that we have to refer to other bureaus; but the great majority of them we have to handle. A great many refer to soldiers' claims during the war and the readjustment of pay and matters of that character.

I have also shown on this chart that although the regular service itself is decreasing somewhat, the work in connection with the payment of the National Guard is reflected in our office. We have to make payments to both the Regular Army and to the National Guard.

This green line indicates the strength of the National Guard July 1, 1921. At that time it totaled 113,640 men. The National Guard has since increased so that on February 28 it had 144,668 men.

The Bureau of Militia Affairs expects to bring the National Guard by June 30 up to 160,000.

The vertical columns below the curve indicate the composite strength of the Regular Army and the National Guard, so you see that the reduction in the total force is not very great. The red caps on the blue columns, which represent the strength of the force in the office of the Chief of Finance, indicate the overtime we have required of the employees.

We have, as I say, 202 employees as of April 1 in the office of the Chief of Finance. Our estimate was for 196 employees for the coming fiscal year. The House bill reduced the number of employees to 184, represented by this vertical column.

In applying the overtime performed by the personnel, and assuming that the combined strength of the Regular Army and National Guard will remain constant after July 1, it is possible now, after observing eight months of work done, to show that the office really requires 204½ employees without any overtime, which is indicated by this vertical column. Based on the above deductions as illustrated

in the chart we would like to ask that the original estimate be restored, which will require the addition of \$21,200 to the provision made by the House for the office of Chief of Finance.

ADDITIONAL EMPLOYEES.

Senator SPENCER. And what classes of clerks will be increased?

Lieutenant Colonel CLOPTON. The increase will consist of an increase of 10 employees in the \$1,800 class, 16 employees in the \$1,400 class, and 1 messenger at \$900.

Senator SPENCER. \$1,800 is class what?

Lieutenant Colonel CLOPTON. Class 4.

Senator SPENCER. Ten more?

Lieutenant Colonel CLOPTON. Yes.

Senator SPENCER. That is 38 instead of 28?

Lieutenant Colonel CLOPTON. Yes. Sixteen class No. 2 clerks, \$1,400.

Senator SPENCER. That is, 56 instead of 40?

Lieutenant Colonel CLOPTON. Yes; and one messenger at \$900, and eliminate six \$1,600 clerks and eight \$1,200 clerks.

Senator HITCHCOCK. A net increase in money of how much?

Lieutenant Colonel CLOPTON. \$21,200. That represents the set-up in our office as of to-day.

Senator SPENCER. What was that last elimination?

Lieutenant Colonel CLOPTON. Six out of the \$1,600 class.

Senator SPENCER. Out of class 3?

Lieutenant Colonel CLOPTON. Yes; and eight out of \$1,200 class.

Senator SPENCER. Yes; class 1.

Lieutenant Colonel CLOPTON. Yes, sir.

Senator SPENCER. Instead of 60, 48?

Lieutenant Colonel CLOPTON. Fifty-two.

Senator SPENCER. Oh, take eight out?

Lieutenant Colonel CLOPTON. Yes.

Senator HARRIS. If they reduce the Army, will you need these extra clerks?

Lieutenant Colonel CLOPTON. Yes; I think we will. That is what I undertake to show, Senator. Our estimate was made, of course, on the basis of 150,000 men in the Army. The chart, however, has been built to bring it down to 115,000, showing that our estimate for an Army of 150,000 is below normal requirements, as now determined after eight months' experience. When we made our estimate, of course, we did not have the advantage of an eight months' period of work done. The estimate was made shortly after the beginning of the fiscal year. We had to have that in by November. Now, in the light of our eight months' experience, our estimate is lower than it should be.

Senator HARRIS. But you think you can get along on it, do you?

Lieutenant Colonel CLOPTON. Yes, sir.

Senator HARRIS. Without interfering with the work?

Lieutenant Colonel CLOPTON. Yes, sir.

Senator WADSWORTH. In addition to taking care of the pay of the Army and the National Guard, the office also does a good deal of auditing and reviewing of contracts, does it not?

Lieutenant Colonel CLOPTON. Yes; sir; the office has supervisory charge of the auditing of contract work. The majority of the auditing is done in the field, supervised by a small group in the office of the Chief of Finance. They go over the estimates and check up the knotty problems in the field. If we continue the contract audit work, the force in the office of the Chief of Finance should be increased to do that work with. It has been estimated by the officer in charge that if the contract audit is to be completed within five years it will require at least 15 employees in the office of the Chief of Finance solely engaged on that duty. He now has but two that he can spare for the work.

I may add in connection with the changes in salary grades we are asking, we now have 38 employees in the \$1,800 grade, whereas the House bill provides but 28. If the latter number remains unchanged, we will have to demote or separate from the service some of the old and efficient employees now on duty in the office.

Senator WADSWORTH. Do you want to ask any questions?

Senator HITCHCOCK. Was this office established before the war?

Lieutenant Colonel CLOPTON. This office was not established before the war; no, sir. As best we can determine we now have in the office about 8 or 10 less employees occupied in finance and property audit and contract audit work than the entire group of the bureaus had on similar kindred work previous to the war, based on the best figures we can obtain. There were about 200 employees throughout the different branches of the War Department occupied on finance or property audit work prior to the war.

Senator HITCHCOCK. Are these salaries net, or do they get the bonus?

Lieutenant Colonel CLOPTON. They get the bonus in addition; that is, those up to \$2,750.

Senator HARRIS. \$2,500.

RED CROSS AUDITORS.

Lieutenant Colonel CLOPTON. Six of the employees are Red Cross auditors, but it is understood the Red Cross can eliminate two of their \$2,750 employees. They have had six auditors for some time, but are now able to get along with four. The money provided by Congress for the Red Cross audit is paid back to the Treasury by the Red Cross itself. The aggregate salaries of the six Red Cross auditors is \$17,500. We pay the salary, but the money is covered into the Treasury, not back to us, by the Red Cross, so we derive no direct benefit except acting as agent in paying for the Red Cross audit, which is required by action of Congress.

Senator HITCHCOCK. I understand the Red Cross organization is making very material reduction in its expenditures now?

Lieutenant Colonel CLOPTON. Yes. For that reason two Red Cross auditors at \$2,750 each can be dropped.

In my discussion, however, of the number of employees for the Office of Chief of Finance, I have omitted the six of the Red Cross. I have not considered them as a part of our office in the calculations for the work that we have to do.

Senator WADSWORTH. I understand you to mean, Colonel, that it would be possible for us to reduce the six at \$2,750 to four at \$2,750?

Lieutenant Colonel CLOPTON. Not exactly. Of the six, one receives a salary of \$3,500, one of \$3,000, and four receive \$2,750. If you drop two of the four receiving \$2,750, a reduction of \$5,500, they can get along. They have so notified us.

General LORD. Those two clerks have been let out and are not employed now.

Lieutenant Colonel CLOPTON. It will take the \$21,500 I have mentioned to provide for the Office of the Chief of Finance, exclusive of any consideration of the Red Cross.

Senator HITCHCOCK. Your estimate is for 196 men instead of 202, as you now have?

Lieutenant Colonel CLOPTON. The 202 that we now have does not include the Red Cross. The provision in the original estimate was 202 inclusive of the Red Cross auditors. That is why I speak of 196 as our estimate for the office of Chief of Finance.

Senator WADSWORTH. Anything else?

FIELD FORCES.

Lieutenant Colonel CLOPTON. May I take up our field force, Mr. Chairman?

Senator WADSWORTH. Yes.

Major BROWNE. That item is on page 22, line 14.

Lieutenant Colonel CLOPTON. The estimate we submitted for the field force amounted to \$1,267,000. The House bill reduced the amount by \$267,000, giving us a flat \$1,000,000 for the field force, a reduction of 21 per cent.

Our estimate provided for 905 civilians for work in the field. Under the House provision we can employ but 715 civilians, a reduction of 21 per cent both in cash and in individuals. We would like to have the original amount restored, in order that the work can be conducted in the next fiscal year without dropping out some of the essential duties of the Finance Department.

I have here a chart which shows in similar manner the relation of work and reduction of personnel in the field as I did for the office of the Chief of Finance.

Starting with January, 1921, the red line indicates the number of employees at that time. We then had 1,600 employees in the field. We have now reduced the number of employees to 822.

The best available key to labor performed was the number of vouchers handled in the field. The black line shows the irregularity in the number of vouchers handled and paid by the field force, the peak of vouchers handled, and the curve showing the decrease in personnel illustrates the steady reduction which has been going on in our field force.

Senator HITCHCOCK. You estimate for 905, although you now have only 822?

Lieutenant Colonel CLOPTON. Yes, sir. I will demonstrate why that is, Senator.

On this chart, in the upper diagram, the black line shows the reduction effected in the Regular Army from 210,370 as of July 1, 1921, to 133,326 as of February 28.

The red line shows the reduction in the combined force engaged on finance in the field. By that I mean the enlisted men and the

civilians both, from 1,671, July 1, 1921, to 1,312 as of February 28, 1922.

The Army reduction has been a reduction 36.7 per cent. We have been able to accomplish by forcing out and reducing employees wherever possible a reduction of only 18.8 per cent.

Extending the Army alone to June 30, when it will drop under the present bill to 115,000, the net reduction during the 12 months in the Army will amount to 45.3 per cent. By applying the same ratio, the field force in the Finance Department can stand a reduction below the strength of July 1, 1921, of 23.2 per cent.

Our field force is made up of both civilian and enlisted personnel. Our enlisted personnel is contingent upon the size of the Army. We are given a definite allotment based upon the size of the Army. When the Army was reduced to 150,000 the finance quota was fixed at 709 by the General Staff, approximately 199 in excess of our pro rata share. This excess was given as we were short-handed in the field. We have never been able to reach the total number of enlisted men authorized because of the difficulty of obtaining men qualified for finance work to fill the lower grades. The upper horizontal lines on the chart show the situation of the combined field force, enlisted and civilian, July 1, 1921. At that time we had 522 enlisted men and 1,149 civilians, a total force of 1,671.

On February 28 we had made a reduction of 18.8 per cent, the total force on that date being 1,357 employees, of which 514 were enlisted men and 843 were civilians.

Our estimate for the fiscal year provided for 905 civilians, because on the basis of 150,000 we had been notified that our enlisted quota would be reduced to 482. The total of the two, 1,387, represents a reduction of 17 per cent instead of the 18.8 per cent shown on the chart. The reason for the difference being that there are now from other services, i. e., Quartermaster Corps, Ordnance, etc., approximately 90 civilians engaged solely on finance work in the field, where finance officers are detailed at small posts and stations from other services to do the finance disbursing work in addition to their other duties. With a reduction in their estimates, they will call their employees off of our work, and we will have to fill their places. We compromised by making an estimate for a 17 per cent reduction as possible for an Army of 150,000. The House bill makes a reduction both in the Army and in the amount appropriated for the field force. Finance Department, so that under the appropriation we can employ but 715 civilians.

These 715 civilians, plus our quota of enlisted men for an Army of 115,368, gives us a total of 1,085 for field purposes, or an aggregate reduction of 33.9 per cent.

We have shown here that our work can tolerate a reduction of but 23.2 per cent for efficient transaction of business. By applying that percentage to an army of 115,000 it will require 1,283 employees for the field service, of whom 368 will be enlisted men and 915 should be civilians. We, however, have estimated for only 905.

If the original amount estimated for is not restored to this bill our work of auditing war contracts in the field will materially decrease. We now have, I believe, at the present time, 85 individuals engaged on contract audit. We started out at the beginning of the year with

114 on contract audit, but because of the demand for economy and savings we have cut the number 100, we have hoped to keep on the work to 85, separations being made as the work transferred from one section of the country to another, employees being separated at one point and others taken on at other points, which accounts for the variation appearing on this chart as engaged on contract audit. We estimate we should keep continuously on contract audit work approximately 90 employees in the field.

General LORD. May I make a statement?

Senator WADSWORTH. Certainly.

CONTRACT AUDIT WORK.

General LORD. The Attorney General is greatly interested that this force be not reduced, and has written a letter to the Secretary of War stating he will be glad to come before the committee, if necessary, in the interest of this work; and I would like, if you have the time, to deal briefly with the contract audit work as to what it has done and is doing.

After the signing of the armistice there was started in the various bureaus an audit of contracts, and this was taken up by the Finance Department and an organization provided which devoted its work exclusively to the audit of these war contracts, not only those that were terminated under the Dent Act but those that ran to completion during the war.

We have thus far audited approximately 15,000 of these contracts, and it is estimated there are some 150,000 of these contracts in all that should be audited.

Senator SPENCER. And it would take you about two years to do it, General?

General LORD. The way we are going now, it will take about 15 years, and after five or six years the audit is not of much use.

Senator SPENCER. Did they not estimate in the House hearings that it would take two years?

Lieutenant Colonel CLOPTON. Mr. Senator, I made that statement very tentatively, because I was not advised at that time. That appears in my statement before the House committee.

General LORD. The statement was made somewhere, not by Colonel Clopton, that one-third of these contracts were audited. That was one-third of the Ordnance contracts that had been audited and not one-third of the Army contracts.

There has been found a total due the Government at the very outside up to date through this contract audit from overpayments, property missing that has not been accounted for, and discrepancies of all sorts—failure to comply with specifications of contracts—a total up to the date of March 31 of \$45,681,129.39. Now, that is not all collectible, and I would like to analyze that somewhat.

RECOVERIES IN MONEY AND PROPERTY.

The actual recoveries in money and property by deduction from claim awards by contractors who offer compromise or return of property in kind, \$1,894,624.23.

Charges against contractors which will apparently require legal action to recover, and have been reported to the Department of Justice or the general accounting office for such action, \$4,370,014.49.

Amounts included in reports of audit, but found to have been covered in previous claims settlements, \$1,196,909.11.

In process of collection directly or through other War Department branches, held pending reinvestigation, etc., \$26,645,426.61.

In addition to doing this work the bureau is constantly being called upon by the Attorney General for assistance. We are now working on 10 cases to furnish the Attorney General information to defend claims made in the Court of Claims.

At the rate we are going, taking the force that we have under our present appropriation and all that we can spare for this work, it will take us 15 years to complete these contracts.

It is a matter of policy. The matter has been put up each year to decide whether or not we should make it a more elaborate organization and proceed. The most that we are paying our field force is one man \$4,000. One thing that has troubled me has been the question of the integrity of our employees under cases where they are finding so much money due the Government.

I asked Captain Sullivan, who is the head of our property audit, to be here to-day, and if the committee is interested in knowing what it would cost if we should clean these up in five years and whether it is worth while to attempt it, I think he can give you some interesting details in reference thereto, if you would like to hear it.

Senator HITCHCOCK. I should, Mr. Chairman. I think this is a very important matter. I had an idea that was all provided for.

General LORD. We are getting checks all the time. I have brought up an exhibit of checks that are coming in. Here is a handful of them we are receiving as the result of our audit. I have a list of them.

Senator HARRIS. What do they amount to?

Captain SULLIVAN. The largest check that is here is for \$39,725.73. I think the largest individual payment we have gotten has been \$98,000.

Senator HARRIS. What is the total, do you know?

Captain SULLIVAN. One million eight hundred thousand dollars we have collected either in money or by the return of property which belonged to the United States, which the contractor had in his possession and never returned or accounted for.

Senator HARRIS. It would be a good investment if you could get some more like that, General. We would give you some more men.

General LORD. It would perhaps be wise. The total cost of employees engaged on this work since August 1, 1920, was \$297,752.52.

Captain SULLIVAN. That \$1,800,000 has been collected, you understand, by merely writing letters to the contractors and informing them of the result of the audits, and asking them for a check. The remainder of the \$26,000,000 which is now in process of collection in one way or another, including \$4,000,000 which we have referred to the Department of Justice or the general accounting office, we expect to be largely collectible, but it will take some time and require legal action. There is at least one of those cases in which there is a charge of \$2,000,000, and others of similar sums, and in those cases

the contractors will no doubt dispute our claims, and there will be legal action necessary. I think they are all quite well founded.

Senator SPENCER. You mean to say that the claims, and not the counter claims, are well founded?

Captain SULLIVAN. Yes, sir. The cost of auditing these claims has been, roughly, \$15 apiece, and we have found an average of \$2,000 short of these contracts. I should say that on 15 per cent of the accounts there was a charge of one sort or another. Most of the charges are based on errors made in perfect good faith by the Government or by the contractor, so that it does not imply any wrongdoing upon the part of anybody.

Senator SPENCER. Is there any percentage of these audits that shows a credit?

Captain SULLIVAN. Yes; quite a large number.

Senator SPENCER. How large?

Captain SULLIVAN. I should say one to 30 or 40 cases where a charge is preferred on behalf of the Government, and very frequently where there is a charge on behalf of the Government, at some other stage there is a place where the Government overcharged the contractor in some way, so there is an offset. There are quite a considerable number of them.

Senator HITCHCOCK. You spoke of a number of the audits you made showing money due the Government, which were disputed by the contractor, and you said that they had been adjusted in some other way.

Captain SULLIVAN. That was where the War Department Claims Board in settling a contract under the Dent Act knew of the fact of the shortage, and included that as one of the items in their settlement of the claim. Where it appears that the War Department Claims Board was informed that the shortage existed, although sometimes in the claim papers it is not quite clear what weight they gave to the shortage, we assume that they made a proper deduction on the contractor's claims to cover it.

Senator HITCHCOCK. Under the Dent Act the board completed their labors, did they not?

Captain SULLIVAN. Yes, sir.

Senator HITCHCOCK. Did they not examine all the contracts, including those you are going over now?

Captain SULLIVAN. No, sir; only the defective, illegal, or terminated contracts. There were many contracts that ran to completion before the armistice, and there was no claim. Even in contracts where the War Department Claims Board has acted, in a considerable number of the claims they reserved the Government's claim as regards shortages of property. That was a matter that was not considered by the claims board at the time it acted; and short of an audit of those contracts, I do not know of any machinery that will or would have developed that shortage on the contracts; that is, shortages of property and materials which were furnished by the Government to the contractor to use on his contract. A great deal of that was done by the various bureaus and in some cases the records showing the transactions were very incomplete, and no machinery was provided, other than our audit, for catching up such matters.

Senator WADSWORTH. You say you found \$1,800,000 where they were paid too much, and others were paid too little. Do they amount to very much? That is one in forty.

Captain SULLIVAN. No, sir; I would say that those were very small in monetary value, compared with those where we find an amount due the Government. Wherever there is an offset—that is, where the Government owes the contractor on one account and the contractor owes the Government on another—I would say that the net was invariably in favor of the Government.

We figure that after five years' time there will be no benefit to be gained by this audit. It will be very difficult to collect from the contractors then, and it is getting increasingly difficult to determine from the records what happened. They are becoming more confused. Every time an office is moved from one point to another the records become mixed, and we have to get in and sort them out, because usually the other bureaus, whose records they are, have no force available for that purpose. The records of three of those offices were moved into one central point recently, and very shortly after there was a fire in the building which destroyed many of them. Things of that sort are making it more difficult, as time passes, to make the audit sustainable. So that I think after five years time it will be of very small use; and at the present rate it will take us 15 years to complete it. That involves at present a yearly expenditure of about \$150,000 to audit the contracts. To complete it within five years would cost half a million dollars a year.

Senator WADSWORTH. You say you are spending about \$150,000 a year now?

Captain SULLIVAN. Yes.

Senator WADSWORTH. On this particular branch of field work?

Captain SULLIVAN. Yes; and that in a year and a half has cost the Government \$259,000, and has paid the Government \$1,800,000.

Senator WADSWORTH. With a possible \$26,000,000 to come, as the maximum?

Captain SULLIVAN. With a possible maximum of \$26,000,000 to come; that is, the \$1,800,000 represents actual cash receipts and property received.

Senator HARRIS. Your idea is that if this work is completed now the Government will get very much more than if it is continued for several years?

Captain SULLIVAN. Without any question. As to the proportion of charges resulting, if we consider that the proportion of charges resulting from the audit of contracts will continue over the 150,000 contracts we still have to audit, that would mean a recovery for the Government, or an amount found due on behalf of the Government, the greater part of which we can recover, of about \$200,000,000.

Senator HITCHCOCK. I did not quite understand how many men are employed.

Captain SULLIVAN. There are 85, at present.

Senator HITCHCOCK. Has the House proposed to cut that number down?

Captain SULLIVAN. Well, of course, the amount of the appropriation is not divided. There is nothing specifically for that purpose. But if the House appropriation, which is \$267,000 lower than the

estimates, stands, that work will be very much crippled, if not entirely discontinued. We think it would not be practicable to keep up the current work of the department, the disbursements, and so on, and do other work. That will require the whole force we have.

The CHAIRMAN. If you did not get this \$267,000 you would consider the difference between the House appropriation and your estimates, would it be necessary to penalize or victimize this contract audit alone? Could you not reduce on something else and save this?

Captain SULLIVAN. Well, of course, I think there is no question that some work would be still done on contract auditing. I do not think that General Lord would consider entirely discontinuing it. But if it were materially reduced below the number of cases that we are doing now, it would not seem to me that we were getting very far with it. We are now auditing at the rate of 10,000 contracts a year, and there are 150,000 contracts. The number that we would be able to audit would be very small as compared with the number to be audited.

General LORD. Mr. Chairman, might I say in connection with that question you asked that this field force has largely to do with the payment of bills out through the various parts of the country; and beginning on July 1, 1920, we made payments so promptly by having sufficient force to make the payments and handle all vouchers that the saving up to and including January in discounts amounts to \$926,956.47. The troops have to be paid, and we want to take advantage of all these discounts by paying within the discount period, and there can not be a constant reduction and restriction of the force. We have got to take it off of prompt payment of the bills, as well as off the contract audit, because the current work of the Army must be carried on and troops must be paid.

Senator HITCHCOCK. I will say this now: That I am in favor of keeping that department up to the top and doing that business.

Senator WADSWORTH. General Lord, may I ask you this question: As to the closing up of this work, especially the auditing of contracts, was that taken up with a good deal of emphasis with the Director of the Budget?

General LORD. It was not.

Senator WADSWORTH. Why not?

General LORD. It has been discussed with him, but nothing in the way of developing a larger activity. We have presented it to the committees each time when we have had our personnel bill up, showing how rapidly we are doing it. I myself have been somewhat in doubt as to the wisdom of attempting to push this thing too strenuously. When we started out we started rather gingerly with it, thinking we did not want to disturb people and scare everybody, we put a small force on it and began carefully, and we made such slow progress, because much of the force we have is diverted on the other things we have to do, like the assistance which we render to the Attorney General, which is most proper and most important for us to render, and because the proceeding in regard to these contracts has been longer than we expected, so that it seems doubtful whether he should continue as we are and audit as many of the contracts as possible, or whether it is wise to attempt to clear it all up within five years.

Senator WADSWORTH. What is your judgment?

General LORD. I think now that we had better try to do it.

Senator WADSWORTH. To clean it up within two years?

General LORD. Yes; within five years.

Senator WADSWORTH. The Budget estimate was \$1,267,000, and on that basis of the appropriation with the proportion allowed for the contract audit it will take your 15 years.

General LORD. I know that the Director of the Budget is interested in this work; he knows what we are interested in doing, but he has left it entirely to the War Department's policy of accounting. I know he would favor an increase of that sort, and if you think it wise, I will take it up and get an expression from him to the committee as to what he thinks he would like to have done.

Senator WADSWORTH. I think it is worth our consideration. I would rather spend \$10,000,000 or \$15,000,000 now than to spend \$15,000,000 stretched over 15 years.

Senator HARRIS. And maybe at twice or three times the cost.

General LORD. The Attorney General is anxious to have the force increased. I will venture to make the statement that he is anxious to have the work done and done now.

Senator HARRIS. Mr. Chairman, in line with your suggestion, if General Lord would get that supplemental report from the Budget Bureau—

Senator WADSWORTH. Senator, do you not think it would be a good thing to hear from the Attorney General's office?

Senator HITCHCOCK. Yes; approximately one-eighth of these men are employed on this work?

General LORD. Yes.

Senator HITCHCOCK. Or one-tenth of the men.

Senator WADSWORTH. Then, at a convenient or appropriate time in the future we will be glad to hear from you again on this, General.

General LORD. Yes, sir.

Senator WADSWORTH. And, if the Attorney General and General Dawes are sufficiently interested to appear before the committee, the committee would be very glad to hear from them about it. Is there anything else on finance?

General LORD. I think that is all.

Senator WADSWORTH. Will you take up another topic between now and 1 o'clock?

General LORD. We have General Rogers here and Colonel Penrose and Major Daly.

General ROGERS. Major Daly has charge of that part of the hearing that comes next.

STATEMENT OF MAJ. C. P. DALY.

Senator WADSWORTH. This is on page 44 of the bill.

Major DALY. The Budget estimate under this head, Mr. Chairman, covered 423 employees, costing \$569,660. The House, as they passed the bill, provided for 419 employees, costing \$563,060.

There was eliminated from the Quartermaster General's estimate an auto spare parts engineer supervisor, at \$3,000, and four laborers. We are asking to have those employees restored, which will make the estimate 424 employees, costing \$568,940, which is \$720 under the

amount provided in the Budget. It is less than the Budget. We are asking to have restored the spare parts supervisor, who was dropped through error in the testimony before the House Committee on Appropriations, and the force of four laborers.

Senator WADSWORTH. What is the pay of the spare parts engineer?

Major DALY. \$3,000.

Senator WADSWORTH. And what are the laborers?

Major DALY. \$720 each per annum.

Senator HITCHCOCK. What were the pre-war figures on employees?

Major DALY. We had about 323 employees in 1917, at the beginning of the war.

Senator HITCHCOCK. And now you have 424?

Major DALY. We want 424; yes, sir.

Senator WADSWORTH. How many have you now?

Major DALY. Six hundred and thirty-one. We had 323 in 1917, but other activities have been added by law to the Quartermaster General's office which we did not have before the war.

Senator WADSWORTH. What was the amount before the war?

Major DALY. About \$411,720. The act of June 4, 1920, delegates to the Quartermaster General the purchase of all articles common to two or more bureaus of the War Department. That we did not have before the war. Our supply points have expanded in size and increased in number. We have acquired a material increase in our transportation activities. The Quartermaster General's office before the war never at any time had sufficient employees for the efficient carrying on of its duties. The Quartermaster General got along with what he had; but there were many duties not performed, and statistics and matters of that kind important in the conduct of the business of the department were neglected.

Prior to the war we had no such organization as war planning; that has since been added, and that imposes duties in the way of statistics and working up data in the various services of the Quartermaster General's office that did not obtain in 1917. Those activities I have mentioned are essential duties, and we should have carried them on before the war.

Senator HITCHCOCK. It is a pretty large increase—from 323 to 424 employees.

Major DALY. Yes, sir; but that is a small increase compared to the increase in duties. Our duties have increased at least 200 per cent.

Senator HITCHCOCK. Have you taken over the services of the duties formerly performed by some other branches of the service?

Major DALY. Yes, sir; of supplies common to two or more bureaus. We are also handling certain utilities service, previously handled by other bureaus of the War Department.

Senator WADSWORTH. Yes; the Quartermaster General's Department has taken on a lot of important things which were scattered before; and it was the purpose of the Army reorganization act that they should do so.

Major DALY. Yes, sir. The increase of the Budget in this bill, compared to the duties taken over, is very small. I want to repeat that the increase in duties has been over 200 per cent.

General ROGERS. The handling of all real-estate matters pertaining to the War Department has been placed with the Quartermaster which adds materially to the work of the office.

Major DALY. And the amount that we are asking for before your committee, Mr. Chairman, is, of course, less than the amount in the Budget. We are not asking for any increase on the Budget figures.

Senator WADSWORTH. You say you had 323 employees in the old office in 1917, and now you have 424?

Major DALY. We are asking for 424. We have more than that to-day.

Senator WADSWORTH. How many have you to-day, roughly?

Major DALY. Six hundred and thirty-one. We are reducing the number of employees, so that by July 1 we will have reached 424.

Senator HITCHCOCK. So that you are actually taking a reduction?

Major DALY. Oh, yes; we have reduced 61 employees since January 15.

Senator HITCHCOCK. What did the House allow you?

Major DALY. The House allowed us 419.

ENGINEER SUPERVISOR OF SPARE PARTS FOR MOTOR VEHICLES.

This spare-parts supervisor is an essential employee. The motor transportation of the Army had not even been worked out in 1917. We had a few motors that were brought in, due to the trouble between the United States and Mexico. It is now an essential part of the Army, and in that sense, of the Quartermaster General's Office. One of the duties of the Office of the Quartermaster General is the purchase of spare parts and the distribution of them. That can be either very economical or very expensive, and it can only be handled economically by having a qualified man to attend to it. In the Quartermaster General's Office action is had on all requisitions for spare parts for distribution for maintenance of the motor transportation.

Senator HITCHCOCK. Would it not be possible to assign an officer to that duty?

General ROGERS. Officers are not qualified, Mr. Chairman, for that particular work.

Senator HITCHCOCK. I am surprised to find that they can reduce from 631 employees down to 424. Is that reduction not to occur until June?

Major DALY. Not until July 1, but we are doing it gradually—monthly—between now and July 1.

General ROGERS. We are gradually reducing the number of employees now assigned in connection with the disposal of surplus property. We still have about \$150,000,000 worth of property to dispose of, and we are gradually reducing the amount and reducing the number of employees in the surplus-property branch and also in the salvage branch. We are reducing the number as fast as we can. We are making sales of surplus property constantly.

Senator HITCHCOCK. Will that work be finished by the end of the year?

General ROGERS. No, sir; but we will have it greatly finished by the end of the year. Part of this \$150,000,000 worth of property has been disposed of. Part of it meets with ready sale, but harness and kindred articles are hard to dispose of. All of the commercial articles are meeting with good sales, and we are getting satisfactory results by auction sales. But there are certain things manufactured under specifications for Army use only that we find difficult to dispose of.

Major DALY. We have been able to make a part of the reduction in employees by reason of a recent reorganization of the office. We have consolidated certain activities which had been operated as separate organizations, and in this way we have been able to make a material reduction in the force, and that has worked to bring about this reduction; and the reduction will be entirely effected by July 1, 1922.

Senator WADSWORTH. You think you have no officer who could be used as supervisor of that spare-parts distribution?

General ROGERS. No, sir. It is necessary to have a civilian trained in that class of work for this position.

Major DALY. We have a man on the work, a field-service employee, who is not provided for on the statutory roll.

Senator HITCHCOCK. Is the expenditure for spare parts a large item in the year?

Major DALY. Yes; it will amount to about \$750,000.

Senator HITCHCOCK. How many machines and trucks, approximately, does that provide for? How many have you in the Quartermaster's Department?

Major DALY. Circular No. 2, War Department, January 6, 1922, fixes a total of 38,488 motor vehicles and trailers to be retained for Army use. The motor vehicles consist of automobiles, busses, motor cycles, trucks, tanks, and tractors.

Senator WADSWORTH. Motor vehicles?

Major DALY. Yes, sir.

Senator HITCHCOCK. There are an awful lot of them.

Major DALY. Yes.

Senator WADSWORTH. What is the next item?

NONMILITARY ACTIVITIES OF THE WAR DEPARTMENT.

NATIONAL CEMETERIES.

Major BROWN. It is on page 105, "National cemeteries."

Major DALY. The estimate appearing in the Budget was \$139,438. The amount passed by the House was \$134,798.

I was advised yesterday that the Secretary of War authorized the Quartermaster General to ask the Senate Committee that the amount as passed by the House be increased to the amount as originally in the Budget.

REPAIRS TO ARLINGTON MEMORIAL AMPHITHEATER AND CHAPEL.

The House added to the national cemetery appropriation the money that heretofore has been appropriated for the care of the Arlington Amphitheater, and in our testimony before the committee we stated that by adding it to the national cemetery appropriation a certain reduction could be made in the number of watchmen employed; but the House cut it under our recommendation, and they have brought the amount down to such a low amount that it is not possible to efficiently operate the amphitheater and look after it and take care of the grounds in addition to the work incidental to the care of the Arlington Cemetery.

The amount of the estimate as submitted in the Budget is far below the actual requirements, but it was kept down because of the for economy in expenditures.

The cemeteries have not had sufficient money appropriated for their upkeep for the last 10 years. There has been a constant, growing deterioration which we have not been able to keep up with from the appropriations made, but we are not asking for any increase over the Budget other than to bring the amount up to the Budget by increasing the amount passed by the House.

Senator HITCHCOCK. How many national cemeteries are there?

Major DALY. Eighty-three.

Senator HITCHCOCK. I did not know there were as many as that.

General ROGERS. There are 82 in the United States and there is one in the City of Mexico. There is just one outside of the country, and we are planning for eight cemeteries in Europe in addition to those.

Senator WADSWORTH. They are not provided for in this bill?

General ROGERS. No, sir.

Senator WADSWORTH. That will develop in a year or so from now and they will appear in the annual appropriation bill?

General ROGERS. In the annual appropriation bill. There is one more appropriation—that amount that you have in the resolution. That was just half the amount that was necessary to complete the Budget, and then, when the next appropriation comes up, these items will be all covered in the main bill.

Major DALY. We expended in the fiscal year 1921 for national cemeteries, \$247,821.89, and we obligated for this year to March 11, \$226,442.99; so that the amount in the Budget is far under the actual needs.

Senator WADSWORTH. What sort of work will you abandon as the result of the reduction in this appropriation?

Major DALY. We will probably have to forego repairs of lodges, and work on the grounds, and it is principally that class of work that will be abandoned.

Senator WADSWORTH. Will the headstones and graves and drives and so on receive less attention?

Major DALY. The graves will not receive less attention, or the headstones; but the drives and walks will and the drains will, and repairs to lodges.

Senator WADSWORTH. In the cemeteries?

Major DALY. Yes, sir.

RECONDITIONING ROAD FROM FORT GIBSON TO FORT GIBSON NATIONAL CEMETERY, OKLA.

Senator WADSWORTH. I notice the House has just put in a \$20,000 appropriation, which was apparently done on the floor of the House, for a road from Fort Gibson, Okla., to the Fort Gibson National Cemetery.

Major DALY. Yes, sir; that was done on the floor of the House and was not originated by the Quartermaster General.

Senator WADSWORTH. Yes; was there an emergency there which persuaded the House to put in that provision?

General ROGERS. I beg your pardon?

Senator WADSWORTH. Was there an emergency there at Fort Gibson that persuaded the House to put in that provision?

General ROGERS. I think it was put in at the request of Miss Robertson. I think she made a speech on the floor and asked that this money be appropriated, claiming, as I remember it, that on account of some bodies being taken out over this trail, of the dead of the World War, it was not a suitable road. But it has been up several times, and neither myself nor the Secretary of War has approved that item.

Senator HITCHCOCK. What is the length of that road; can you state?

General ROGER. Colonel Penrose can state that, I think.

Colonel PENROSE. Major Daly has that matter before him.

Major DALY. The road from the town of Fort Gibson, Okla., to the Fort Gibson National Cemetery is at present what might be called a dirt trail about 1 mile long and 30 feet wide and is the only approach to the national cemetery from Fort Gibson. It has never been improved or maintained by either the Government, State, county, or the town of Fort Gibson.

There are buried in the Fort Gibson National Cemetery 297 known and 2,208 unknown soldiers, making a total of 2,505 internments. There were only five burials in this cemetery during the past fiscal year. It is not often used for local burials.

Senator HITCHCOCK. It is a pretty neglected road, is it not?

Senator WADSWORTH. The road, of course, does not pass through Government property?

Major DALY. No, sir.

Senator WADSWORTH. Has any effort been made to persuade the county to improve that road?

Major DALY. In the spring of 1905 the Quartermaster General was advised by the superintendent of the cemetery at Fort Gibson that certain parties claiming to own certain portions of the road extending from the eastern limit of Fort Gibson to the national cemetery were erecting wire fences across the road to inclose the land claimed by them, thus closing the road as an approach to the cemetery. The matter was taken up with the Interior Department, which had the case investigated by one of its agents. This agent reported the road as having been in existence about 40 years and stated that it should be maintained as a public highway, either by gifts from allottees or by condemnation through the office of the Indian agent. He secured a waiver of damages for land taken from all allottees through whose land the road ran except one, Mr. R. C. Adams. He recommended the road be permanently established as it then existed, and that if Mr. Adams refused to waive damages sufficient of his land be condemned and damages assessed by the United States Indian agent, which could be done under section 37 of the Cherokee agreement, which provides for the establishment of necessary public roads under the direction of the Secretary of the Interior, while the tribal government continues, and payment of assessed damages by the Cherokee Nation.

The Acting Secretary of the Interior, in a letter to the Secretary of War, dated September 30, 1905, reported that the United States Indian Inspector located in the Indian Territory had been instructed to advise the United States Indian agent, Union Agency, to permanently locate the road as it then existed and as recommended by the agent.

On June 26, 1908, the Acting Commissioner of Indian Affairs reported that the matter had been disposed of.

H. R. 22638, Sixtieth Congress, first session, which proposed an appropriation of \$20,000 for the construction of a public road to this cemetery, was returned to the Secretary of War March 18, 1910, recommending disapproval.

H. R. 8604, Sixty-second Congress, first session, introduced May 4, 1911, providing for the construction of a military road at the United States Cemetery at Fort Gibson, Okla., connecting same with the town of Fort Gibson. Not referred to this office for report.

H. R. 3352, Sixty-third Congress, first session, appropriating \$20,000 for the construction of a road from the Fort Gibson National Cemetery to the town of Fort Gibson, returned to the chairman, Committee on Military Affairs, House of Representatives, March 20, 1914, with favorable consideration not recommended.

On February 24, 1916, the Superintendent of the Fort Gibson National Cemetery reported to the depot quartermaster, St. Louis, Mo., that a Mr. Mels, land owner between the cemetery and Fort Gibson, informed him that he was going to close up the public road leading from the national cemetery to Fort Gibson, which is the only public road to get from the national cemetery to Fort Gibson, stating that the Government never bought the right of way. Superintendent also stated the road had been in a very bad condition that winter and the people took down Mel's fence on both sides of his field and went through his field. Superintendent requested instructions whether the United States has a right of way, and so forth.

On February 29, 1916, the depot quartermaster, St. Louis, Mo., forwarded the superintendent's letter to this office for instructions, and referred to office indorsement (second) of January 12, 1911, on letter to the superintendent of November 1, 1910, bearing upon the subject, where it was stated the Quartermaster Corps "has no legal interest in this road nor are any funds available which could be used for its reconstruction and repair, but should any attempt be made to encroach on the road or to obstruct it as an approach to the cemetery you will so advise this office."

On March 6, 1916, in letter signed by assistant and chief clerk, War Department, all papers relating to the question of the ownership of this road were forwarded to the Secretary of the Interior, inviting attention to the Interior Department's letter of September 30, 1905, stating that instructions had been given to the United States Indian inspector in the Indian Territory to advise the United States Indian agent, Union Agency, that he was authorized to permanently locate the road as it then existed and as platted by the engineer and superintendent of construction of the quartermaster department, and request was made whether these instructions were carried out and the road permanently located.

On May 17, 1916, this office referred by first indorsement to Secretary of War bill H. R. 13479, Sixty-fourth Congress, first session, appropriating \$20,000 for constructing this road, stating that the United States does not own the land over which the road passes and has never expended funds upon it.

Senator WADSWORTH. I notice that Miss Robertson stated in the House that the Army owned the road.

Major DALY. No, sir; it does not own the land at all, sir. In view of the statement contained in the letter of the Assistant Secretary of the Interior dated May 12, 1916, the office recommends that the matter be referred to the Judge Advocate General for opinion as to the Government's right in the road in order that intelligent report may be made to the chairman of the House Committee on Military Affairs.

On May 23, 1916, the Judge Advocate General returned the papers with the following opinion:

The opinion of this office is requested by the office of the quartermaster general as to the rights of the Government in the roadway leading from the town of Fort Gibson, Okla., to the Fort Gibson National Cemetery "in order that intelligent report may be made to the chairman of the House Committee on Military Affairs" upon a bill (H. R. 13479) for macadamizing the said roadway which has been referred to that office.

The Fort Gibson National Cemetery comprises a small portion of what was formerly the Fort Gibson Military Reservation, situated within the limits of the Cherokee Nation, Indian Territory, and which was transferred to the Interior Department by Executive order of February 7, 1891, "excepting a piece of land 600 feet in length and 500 in width in the southwest corner of said reservation, the same being the site of the Fort Gibson National Cemetery."

No reservation was made in said Executive order of the roadway leading to the cemetery. The lands comprising the reservation reverted to the Cherokee Nation, and by the act of July 1, 1902 (32 Stat. 716), provision was made for the allotment in severalty of the lands of the said nation, but the allotments were made thereunder also without any reservation of the roadway. This road appears to have been in existence for many years prior to the issuance of the above Executive order and the subsequent allotments of this land, but as no reservation of an easement or rights therein was made by the Government in either instance, it does not appear to have retained any authority over or interest in the roadway more than might possibly be said to have been held by any other owner of property lying adjacent thereto. It appears to have been considered doubtful even as to whether the right of the public to have it kept open could be maintained, since in 1905, when steps were taken by certain property owners to close the road where it passed through their property, it was deemed advisable by both the War and Interior Departments to take the necessary action to acquire a right of way from the owners. The land through which the road passed was at that time in possession of the allottees to whom it had been allotted under the act of July 1, 1902, *supra*.

The said act contained the following provision for the establishment of roads across the lands of the Cherokee Nation during the continuance of its tribal government:

"Public highways or roads 2 rods in width, being 1 rod on each side of the section line, may be established along all section lines without any compensation being paid therefor, and all allottees, purchasers, and others shall take the title to such lands subject to this provision; and public highways or roads may be established elsewhere whenever necessary for the public good, the actual value of the land taken elsewhere than along section lines to be determined under the direction of the Secretary of the Interior, while the tribal government continues and to be paid by the Cherokee Nation during that time; and if buildings or other improvements are damaged in consequence of the establishment of such public highways or roads, whether along section lines or elsewhere, such damages, during the continuance of the tribal government, shall be determined and paid for in the same manner."

Section 63 of said act also provided that the tribal government of the Cherokee Nation should not continue longer than March 4, 1906. It would appear, therefore, that under this latter provision the authority of the Secretary of the Interior to establish roads upon the lands of the nation continued until that date.

"It appeared that the national cemetery could not be reached by a road established upon the section lines, in which case under the above provision the allottees would not have been entitled to damages for the lands taken, and hence the Secretary of the Interior on September 30, 1905, authorized the establishment of the road through certain sections as it then existed. The Interior Department reports show that all the owners whose property would be taken had already waived all claims for damages by reason thereof, except in one case in which the Secretary of the Interior states in his letter of the

12th instant that the said party 'is reported to have made such waiver when the road was surveyed and laid out,' and he expresses the opinion 'that the Government's right to maintain the road can not be questioned at this time.'

"It would appear that the effect of the action of the Interior Department in securing waivers of damages from the property owners through whose properties the road passes and in laying out and establishing the said road was to establish a public road, which the Government, along with other owners of property, is entitled to have kept open and maintained, its rights therein being the same as those of other owners of property lying adjacent to the road, and any improvement thereof by the Government would have to be made with the consent of the local highway authorities. It is assumed that the remark of the Secretary of the Interior quoted in the preceding paragraph as to the Government's right to maintain the road is made with the tacit understanding that this right is subject to the limitations above stated.

"It is the opinion of this office, therefore, that the road from the town of Fort Gibson, Okla., to the Fort Gibson National Cemetery as laid out and established by the Interior Department under authority of the act of July 1, 1902, *supra*, is a public road in which the Government possesses the same rights, and no more nor less, than are held by any other property owner whose property lies adjacent to the said road."

On May 26, 1916, the Secretary of War returned the bill to the chairman Committee on Military Affairs, with the following letter:

"I have the honor to return herewith H. R. 13479, Sixty-fourth Congress, first session, being a bill 'To provide for the construction of a military road at the United States cemetery at Fort Gibson, Okla.,' and to recommend, in view of the opinion rendered by the Judge Advocate General, as set forth in third indorsement dated May 23, 1916, copy of which is herewith inclosed, 'that the road from the town of Fort Gibson, Okla., to the Fort Gibson (Okla.) National Cemetery, as laid out and established by the Interior Department under authority of the act of July 1, 1902, *supra*, is a public road in which the Government possesses the same rights, and no more nor less, than are held by any other property owner whose property lies adjacent to the said road,' that this bill be favorably considered. It is thought, however, that the following title would be more appropriate for the bill, and it is suggested that the title be changed to read: 'A bill to provide for the construction of an approach road to the Fort Gibson (Okla.) National Cemetery.'"

Upon reference of H. R. 6741 to the Secretary of War, July 12, 1921, by Hon. Julius Kahn, M. C., chairman of the Committee on Military Affairs, it was returned by the Secretary of War, August 12, 1921, with letter, as follows:

"I have the honor to return copy of H. R. 6741, Sixty-seventh Congress, First session, being a bill 'to provide for the construction of a military road at the United States cemetery at Fort Gibson, Okla.,' and beg to submit a copy of a report made by the Secretary of War on May 26, 1916, on H. R. 13479, Sixty-fourth Congress, first session, which is identical with H. R. 6741, now presented. I also submit copy of a report of the Judge Advocate General of the Army, dated May 23, 1916, on this subject.

"The road from the town of Fort Gibson, Okla., to the Fort Gibson National Cemetery is at present what might be called a dirt trail, about 1 mile long and 30 feet wide, and is the only approach to the national cemetery from Fort Gibson. It has never been improved or maintained by either the Government, State, county, or the town of Fort Gibson.

"There are buried in the Fort Gibson National Cemetery 297 known and 2,208 unknown soldiers, a total of 2,505 interments. There were only 5 burials in this cemetery during the past fiscal year.

In H. R. bill 22638, Sixtieth Congress, first session, also H. R. bill 3352, Fifty-third Congress, first session, and H. R. bill 13479, Sixty-fourth Congress, fourth session, the amount asked for the construction of this road was \$20,000.

"In view of the stringent financial conditions necessitating most rigid economy in national expenditures, favorable consideration of the bill is not now recommended."

The opinion of the Judge Advocate General and the letter referred to are embodied in the above memorandum.

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that the Government never bought the right of way. Superintendent also stated the road had been in very bad condition that winter and the people took down Mels's fence on both sides of his field and went through his field. Superintendent requested instructions whether the United States has a right of way, etc.

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On May 17, 1916, this office referred by first indorsement to Secretary of War bill H. R. 13479, sixty-fourth Congress, first session, appropriation \$20,000 for constructing this road, stating that the United States does not own the land over which the road passes and has never expended funds upon it, but, in view of statement contained in letter of Assistant Secretary of the Interior dated May 12, 1916, recommends that matter be referred to Judge Advocate General for opinion as to Government's right in road in order that intelligent report may be made to the chairman of the House Committee on Military Affairs.

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"The Fort Gibson National Cemetery comprises a small portion of what was formerly the Fort Gibson Military Reservation, situated within the limits of the Cherokee Nation, Indian Territory, and which was transferred to the Interior Department by Executive order of February 7, 1891, 'excepting a piece of land 600 feet in length and 500 in width in the southwest corner of said reservation, the same being the site of the Fort Gibson National Cemetery.'"

Senator WADSWORTH. In other words, that holds that the Government has no right, title, or interest in this trail or road?

Major DALY. Yes, sir.

Senator HITCHCOCK. In addition to the appropriation made for cemeteries in the first paragraph, I think there is \$63,000 appropriated further down for superintendence.

Major DALY. Yes, sir. That is a regular appropriation. There is no change in it. The number is authorized by law and the salaries fixed by law, so that there is no change in that.

Senator HITCHCOCK. So that it makes about \$200,000, altogether, for the cemeteries?

Major DALY. Yes, sir.

Senator WADSWORTH. Apropos of this Fort Gibson road, you will notice on page 106, line 4, the following provision:

No part of any appropriation for national cemeteries or the repair of roadways thereto shall be expended in the maintenance of more than a single approach to any national cemetery.

Senator HITCHCOCK. That is really the law.

Senator WADSWORTH. That is the policy that has been in the bill, as I understand, for years.

Senator HITCHCOCK. Yes; it has always been in the bill.

Senator WADSWORTH. I think we will take a recess now, Major.

(Thereupon, at 1 o'clock p. m., the subcommittee took a recess until 2.15 o'clock p. m.)

AFTER RECESS.

The subcommittee reconvened, pursuant to the taking of the recess, Senator James W. Wadsworth (chairman) presiding.

STATEMENT OF MAJ. C. P. DALY—Resumed.

NATIONAL CEMETERIES.

Senator WADSWORTH. We left off in the middle of a discussion of the national cemeteries, page 106.

Major DALY. The next item in order, Mr. Chairman, is on page 105, "For repairs to roadways to national cemeteries."

REPAIRS TO ARLINGTON MEMORIAL AMPHITHEATER AND CHAPEL.

However, before taking that up, I would like to say that we skipped an item on page 105, beginning on line 23, that the Quartermaster General wants to discuss. It provides "that the unobligated balance of \$5,000 for the construction of the Arlington Memorial Amphitheater and Chapel" be made available for repairs thereto.

An estimate of \$15,000 for that purpose was included in the Budget. This \$5,000 referred to here is the total unobligated balance of the appropriation, and it is not sufficient to do the work necessary. Colonel Penrose is prepared to give you the details of this, if you care to hear him now.

Senator WADSWORTH. We will be glad to hear you, Colonel.

Colonel PENROSE. A board of officers consisting of the engineer connected with the public grounds and an engineer connected with the Quartermaster General's office, with the contractor for the Arlington Amphitheater, met and discussed what was necessary to repair the leaks that have taken place ever since the building was constructed, from the roof into the colonnade and into the boxes and into the chapel below. They made an estimate of \$25,000, necessary to do this. The marble flooring will have to be taken up and waterproofing felt put under, and tile flooring put on.

The Quartermaster General cut this down and found that they could do all the repairing except right in the boxes for approximately \$15,000, and so recommended. The Budget included that in their estimates for the first estimate. The House cut it down to \$5,000. It will be impossible to do any of the work so as to give us any permanent results for that amount of money.

Senator SPENCER. How much of an unobligated balance is there in the appropriation?

Major DALY. \$5,000.

Senator SPENCER. That is the total of the unexpended balance?

Major DALY. Yes.

Senator SPENCER. They gave you nothing more?

Major DALY. No, sir.

General ROGERS. May I make a statement here, Mr. Chairman?

Senator WADSWORTH. Yes.

General ROGERS. I think it is important that this amount be allowed, and I do not think less than \$15,000 ought to be given to do the repairs needed. The situation is due to faulty construction, and we really need \$15,000 more.

Senator WADSWORTH. Was this taken up with the House Committee on Appropriations with any emphasis, and discussed as you are discussing it now?

Colonel PENROSE. Yes; I went before them on that and explained what was necessary.

General ROGERS. I do not think they understood it, or they certainly haven't let us have that additional \$10,000.

Senator WADSWORTH. Is the damage that is going on now quite serious?

Colonel PENROSE. Yes, sir; it is quite serious. It is leaking all the time and the water is staining the marble, and it is taking all the paint off down in the chapel; and that is going to continue. The contraction with the heat and cold there is pulling the flashing away. They put up flashing, but it will not hold the concrete. The construction is of marble and concrete, and the expansion and contraction is so much more than they had any idea of when the contractor put it up that that is the result.

Senator WADSWORTH. This is the roof that is leaking?

Colonel PENROSE. The roof of the colonnade.

Senator WADSWORTH. What sort of roof do you expect to put in there?

Colonel PENROSE. We expect to take that off and replace it by felt, and over that put the new waterproof tiling.

Senator WADSWORTH. Waterproof tiling?

Colonel PENROSE. Yes.

Senator WADSWORTH. Does that cover the whole circumference?

Colonel PENROSE. Yes; I think so.

Senator WADSWORTH. The whole thing?

Colonel PENROSE. Yes, sir.

Senator SPENCER. They wanted you to use a composition of tar and rubberoid?

Colonel PENROSE. Yes, sir. That was impracticable. All the architects and engineers said that would not do.

Senator SPENCER. I suppose they put that on the ground that it would be invisible?

Colonel PENROSE. That roof, you know, is used all the time. We use it to enlarge the seating capacity, to bring it up to the maximum of 20,000. There are over 1,800 seats in that space.

Senator SPENCER. I notice the question was asked, perhaps of you, as to whether anyone from the Engineer Department of the Army or anyone that might be presumed to be familiar with the architectural features or the structure of the building, had given an opinion.

Colonel PENROSE. There was an opinion. Mr. Gillen, engineer of the public buildings and grounds and a representative of Fuller, the

contractor, and other experts, gave opinions. We had the opinion of Mr. Gillen, representing the public buildings and grounds, who was in charge of the building when it was done.

Senator SPENCER. Is Mr. Gillen an expert engineer in those matters?

Colonel PENROSE. He is supposed to be?

Senator SPENCER. What does he recommend to be done?

Colonel PENROSE. He recommends that it be done with this tiling.

Senator WADSWORTH. Did they all join in that?

Colonel PENROSE. They all joined in that—that that was the only possible way they could see of overcoming this difficulty that we had met.

Senator WADSWORTH. Is there a communication from them there that is not included in the House hearings?

Colonel PENROSE. No, sir; this is not included. I gave them extracts from it in my conversation only.

WAR DEPARTMENT,
Washington, D. C., February 15, 1922.

REFERENCE REPAIRS TO COLONNADE ROOF, ARLINGTON MEMORIAL AMPHITHEATER.

Colonel PENROSE,

Cemeterial Division, Q. M. G. O., Munitions Building.

1. Under date of October 28, 1920, this office called attention to the fact that the concrete-paved promenade over the colonnade which forms the outer wall of the Arlington Memorial Amphitheater was leaking in several places, causing serious damage to the marble work and the plaster ceiling of the colonnade itself. At the same time it was noted that the Office of Public Buildings and Grounds was in position to expend a balance of \$1,180 remaining from the original construction work, which they proposed to expend in making certain changes in the drainage system, which they hoped would correct the fault referred to.

2. On July 11, 1921, a further report was made in which it was stated that the changes made by the Office of Public Buildings and Grounds had not proved entirely successful.

3. It was stated that a portion of the concrete roof had been removed in order to permit a more careful examination of the type of construction. Representatives of the general contractors for the work, architects for the building, subcontractors for the roofing work, and the engineer from this office and from the Office of Public Building and Grounds, after a careful investigation, determined that the only method for making the roof permanently tight and waterproof was by removing the existing concrete paving and substituting a paving-tile roof laid in a waterproof mixture, such as is used on the roofs of large office buildings, hotels, etc. The architects also recommended that, in addition, floors of the boxes and of the stage be paved in a similar manner, as there was evidence that these floors, also, were leaking, and while the damage was not so apparent it was nevertheless taking place; architects stated that such pavement would not mar or detract from the appearance of the building in any manner, but would, on the other hand, add to its attractiveness.

4. Since writing the last-mentioned letter this office has done a considerable amount of work out of the funds provided for the maintenance of the amphitheater in the way of pointing up joints and stone work, etc., and some improvement in the condition of the building has been noted. It is believed, however, that the work of repaving as recommended is highly essential and the officer in charge of Public Buildings and Grounds, which office had charge of the original construction, concurs in this belief.

5. It is therefore recommended that at least a portion of the funds for which estimate was made be secured if possible. In view of the fact that the colonnade roof and the stage are the most important it is thought that this work might be undertaken before the waterproofing and new flooring of the boxes is started. It is estimated that \$15,000 will be sufficient to repave and make absolutely water-tight both the colonnade roof and the stage floor. It is believed that should this amount be appropriated and funds made available after July 1,

1923, prices may have fallen sufficiently to enable us to do some work on the box floors in addition, but this can not, of course, be determined at the present time.

6. There is attached hereto a memorandum from the engineer of this office stating the technical reasons for the leaking of this roof.

H. C. BONNYCASTLE,
Colonel, Quartermaster Corps, United States Army,
Quartermaster Supply Officer.

WAR DEPARTMENT,
Washington, 20, 1921.

Memorandum for Colonel Bonnycastle:

1. There was a conference yesterday at the Amphitheater, Arlington, for the purpose of determining the cause of leaks over the colonnade around the Amphitheater and other portions of the building and to determine the best method of correcting the conditions prevailing. This conference was attended by the representative of the Vermont Marble Co., Rutland, Vt.; Messrs. Carrere and Hastings, architects for the building, New York City; the George A. Fuller Contracting Co., contractors for the building, New York City; the Barrett Manufacturing Co. and the Warren Ehret Co., subcontractors for waterproofing, Philadelphia and New York City; local representatives of the Warren Ehret Co.; Mr. F. S. Gillen, engineer for the public buildings and grounds, who was in charge of the construction; and myself as your representative.

2. After a detailed examination of all the conditions had been made, the plans for construction carefully studied, and considerable discussion and debate entered into, it was finally agreed by a large majority of all those present that leaks are primarily and largely due to defects in copper flashing caused by expansion of the pavement over the waterproofing, such expansion being in a measure due to the absence of sufficient expansion joints in the pavement. It was also agreed that in a slight measure some of the leaks are due to seepage through the joints and marble work, but that this is a condition which is neither serious nor which can be remedied, it being the condition found in all masonry structures which are not protected by a metal parapet wall. The first condition—that is, the question of flashing—can only be remedied by the entire removal of the concrete pavement, repairs to existing waterproofing, and replacement of a different type of pavement over the waterproofing. The representatives of the architects were opposed to placing of any type of pavement or roof over this colonnade which would eliminate the possibility of this space being used as a promenade or space for spectators during ceremonies. It was therefore agreed that the best type of pavement and the one that would give the best satisfaction would consist of what is known as "red quarry tiles" laid in cement mortar with a sufficient proportion of proper expansion joints. The Barrett Manufacturing Co. is in position and will lay such a pavement, and if done under their specifications will give a guaranty for 20 years.

3. The boxes in the main portion of the building and the floor of stage, which is over chapel, should, it was agreed, also be removed and replaced by similar tile, the architects believing that this will not only be structurally better but will also have a tendency to relieve some of the glare now prevailing in this building on bright days.

4. Estimated cost for doing this work is \$25,000.

G. L. RODIER,
Construction and Repair Branch.

Major DALY. But there is a communication from Colonel Sherrill, Superintendent of Public Buildings and Grounds, in the House hearings on that subject.

Senator WADSWORTH. Very well; we can examine that in the House hearings, then.

Senator SPENCER. On what page is that of the House hearings?

Major DALY. It is page 526, part 2, of the House hearings.

Senator SPENCER. That is Colonel Sherrill's testimony?

Major DALY. Yes, sir.

Senator WADSWORTH. What is the next?

FURNISHING HEADSTONES.

Major DALY. The next is "For continuing the work of furnishing headstone," etc. We have not any discussion to offer as to the appropriation, but General Rogers has some remarks to make in connection with the proviso added by the House in connection with the purchase of headstones.

Senator WADSWORTH. Very well; we will be glad to hear from you, General.

General ROGERS. Will you let Colonel Penrose make a statement in regard to that first, Mr. Chairman? I will answer any questions as to the headstones after Colonel Penrose makes his statement.

Senator WADSWORTH. Very well.

Senator SPENCER. I would like to ask, before he makes his statement, whether it is not a desirable thing to have the headstones of the men in this Great War of a different character from those of the men in the Civil War, so that the casual visitor would know in an instant from the general appearance as to whether they were the headstones of the Great War instead of the Civil War?

General ROGERS. Yes. I can not understand the reason of the House for putting in this provision in the House bill. The headstone, as Colonel Penrose will explain to you, was recommended by the Quartermaster Corps and approved by the Secretary of War, and also has the concurrence of the Fine Arts Commission. We work with the Fine Arts Commission in practically everything in the planning of our cemeteries. I would like to have the colonel explain this to you.

Colonel PENROSE. The headstone of the Civil War was a granite or a marble stone of 18 inches with a shield cut out and marked in this way [indicating drawing].

Senator SPENCER. Those stones cost about \$4.50 apiece?

Colonel PENROSE. Yes; they cost \$4.50 apiece. Done with a sand blast, the letters stand out and it made it cheaper.

The Fine Arts Commission then decided that they ought to have a distinct headstone for the World War, so that anybody could see the difference between the Civil War and the Spanish War and the World War. This was proposed [indicating drawing]—a marble stone with a base, ten and a half inches at the top, extending sixteen and a half inches above the ground, with a rosette and a Latin cross in the top, and eliminating the cross and making a double sign for the Jewish.

Senator SPENCER. What would you do if a man did not believe in either?

Colonel PENROSE. Well, we would give him a cross anyhow.

After General Rogers and General Pershing went to France and examined the headstones of the English as compared with ours, they decided it would be better to have a little higher stone, and carry the same features.

When it was brought before the Secretary of War, he approved of that, and we will make this now 24 inches above the ground. These drawings are full size [indicating].

Secretary Weeks wanted the name of the State put in, so that that would stand out, and then allow any Biblical inscription or

terms of endearment that the family might want to put on to be put on at their own expense. We will put in everything to here, giving the man's name, his State, his rank, his regiment, and his company, and the date of death. The only difference between these two is that it is a little larger; one is 16 inches and the other is 24 inches.

General ROGERS. May I state that the question of putting this inscription on the face of the headstone is rather copied from the English? That is the way the graves registration of England allows it to be done over there, and I think it is rather a good idea, and the Secretary approves that. That is something new, allowing them to put this other matter on at their own expense. And then, as Colonel Penrose has said, the Secretary wanted to have the State go on there, so as to show what State a man was from.

Senator WADSWORTH. This proviso would prevent you from using either of those designs?

General ROGERS. Anything excepting that [indicating]. Another criticism, I might say, of that headstone is that it is out of date nowadays. They do not have those raised letters now. The reason we adopted this [indicating] is that it will last very much longer, having the letters sunk in.

Senator WADSWORTH. Have you no clue as to the origin of this proviso?

General ROGERS. I do not know a thing about it.

Major BROWN. The discussion is on page 21 of the House hearings.

Senator SPENCER. Might it have been on account of the cost?

General ROGERS. Possibly. These will cost much more.

Major DALY. The objection was based on the cost.

Colonel PENROSE. This new one will cost more than \$7.50. It will cost near \$10, being larger and higher in every way.

Senator SPENCER. The height is about 32 inches?

Colonel PENROSE. Thirty-eight inches; and 24 inches out of the ground. It is 14 inches underneath. There is a picture of the English stone, 36 inches high.

Senator SPENCER. That costs \$80 or \$90?

Colonel PENROSE. \$80 or \$90, because they have much more engraved on it—the regiment and the coat of arms.

Senator HARRIS. What will the cost of this be?

Colonel PENROSE. Between \$10 and \$10.50. This is \$6.20 when we put it out for the Army.

Senator HARRIS. It seems to me that the Government ought to pay a certain part of that additional cost, or ought to pay for a certain number of words.

Colonel PENROSE. There are not very many that are asking for it, and it is out of the military part of it. We give the name of the man and his regiment and his State and the date of his death—that is, everything that pertains to him from the military standpoint.

Senator HARRIS. If the family wants something of that kind on the stone, it seems to me that it is as little as the Government can do to put that on it.

Colonel PENROSE. We have done so much for them. Of course, it is in addition to everything that Congress has done for the returned dead.

General ROGERS. I have the authorization of the Secretary of War to request the committee to withdraw this part of the bill.

Senator SPENCER. You mean this proviso?

General ROGERS. Yes; the Secretary of War has authorized me to ask that it be eliminated from the bill.

Senator WADSWORTH. Is there anything more on that? Thank you very much, Colonel Penrose. What is the next item?

REPAIR AND PRESERVATION OF MONUMENTS, ANTIETAM BATTLE FIELD.

Major DALY. The next item is for the repair and preservation of monuments, tablets, etc., line 24, page 106, within the limits of the Antietam Battle Field, \$5,000. We have no remark to make on that, so far as the amount is concerned.

Senator WADSWORTH. So far as the amount is concerned?

Major DALY. Yes, sir.

Senator WADSWORTH. Have you any remark to make on it in any other way?

Major DALY. No, sir.

Senator WADSWORTH. Why is that a standard item in the bill?

Major DALY. Why is it a standard item separate from the other cemeteries?

Senator WADSWORTH. Yes.

Major DALY. It is because of the nature of the Antietam Battle Field. Almost all the ground, except where the tablets are, is owned by farmers, and it is not on the same basis as a national cemetery, so that it has been separated for that reason. Its care is different.

The same is true of the pay of the superintendent, \$1,500. That is fixed by law, and there is no change.

Senator WADSWORTH. All right. What is the next?

REPAIR AND PRESERVATION OF THE BATTLE-FIELD MONUMENTS AT SANTIAGO, CUBA, AND IN CHINA.

Major DALY. The next item is on page 110, line 4, for repairs and preservation of monuments, tablets, roads, fences, etc., made and constructed by the United States in Cuba and China to mark the places where American soldiers fell, \$100. The amount appropriated, \$100, is not sufficient. \$1,000 is asked for, and \$1,000 was asked for in the Budget. \$900 of that has already been obligated by the commissioner in charge of those monuments, Maj. Webb Hayes, for the hire of a caretaker employed in Cuba to look after the grounds, monuments, and tablets there. No expense is necessary in China. \$900 is already obligated for the hire of a caretaker in Cuba. The caretaker had been employed there until about two years ago, and no care has been given to it since; but there has been appropriated \$1,000 every fiscal year except 1922. It is a regular item in the appropriations. The caretaker was employed there at a cost of about \$900 a year.

Senator SPENCER. Do you think you could pay a caretaker under the wording of this section?

Major DALY. Yes, sir.

Senator SPENCER. You have done it, have you?

Major DALY. Yes, sir.

Senator WADSWORTH. Is there another current appropriation of \$1,000 for that?

Major DALY. No, sir.

Senator WADSWORTH. It was dropped out when?

Major DALY. In 1918, I think; I can get that accurately for you, in a moment.

Senator WADSWORTH. I have a recollection of the Senate Committee on Military Affairs having taken some action at the urgent request of Col. Webb Hayes.

General ROGERS. He is very much interested in that.

Senator WADSWORTH. It may not have survived in the House or it may have been thrown out in conference. I know we had such an item under consideration.

Major DALY. There are no burials there; there are just commemorative tablets.

The first appropriation was made in the fiscal year 1913. The item was omitted from the sundry civil appropriation act for the current year. You have been appropriating for it up to the current year.

Senator WADSWORTH. \$900 is obligated there?

Major DALY. Yes, sir.

Senator WADSWORTH. For this year?

Major DALY. Yes, sir.

Senator WADSWORTH. And that is largely to pay a caretaker.

Major DALY. This is to pay a caretaker at the San Juan and El Caney plots.

Senator WADSWORTH. Does that finish the cemetery appropriations?

Major DALY. Yes, sir; except that the Quartermaster General defended the Guilford courthouse and National Park appropriations before the House. But that has been turned over to the Secretary of War, so that we have nothing to do with it now.

Then there is some legislation on page 107, line 21, that is desired.

**INTERMENT OR TRANSPORTATION OF REMAINS OF CIVILIAN EMPLOYEES DYING AT
MILITARY POSTS IN THE UNITED STATES.**

We desire to have inserted in line 21, after the words "duty in the field;" the words "or at military posts within the limits of the United States."

Senator WADSWORTH. What is the situation with respect to that? You want the authority to dispose of the remains of civilians, civilian employees, not only when they die abroad, in Alaska, in the Canal Zone, or on Army transports, or who die while on duty in the field, but also of the remains of those civilian employees who die at military posts within the limits of the United States?

Major DALY. Who die at military posts.

Senator WADSWORTH. At military posts within the limits of the United States?

Major DALY. Yes, sir; there is no authority for that now.

Senator WADSWORTH. There is none now?

Major DALY. Not to that extent.

Senator WADSWORTH. And you want this authority?

Major DALY. Yes, sir.

Senator WADSWORTH. You might develop that a little bit. I do not know how much that would involve.

Major DALY. It does not involve any additional appropriation, but it gives the War Department authority to do something that they have been doing without any authority of law, that is the fact of it.

Senator WADSWORTH. What is your practice now?

Major DALY. If a civilian dies at a military post they bury him at the post in the Government cemetery.

Senator WADSWORTH. At the Government's expense?

Major DALY. Yes; furnish a casket and bury him.

Senator HARRIS. You make an exception of this case. In all other cases you send the remains to the homes?

Major DALY. Yes, sir; but those who die at military posts are not sent to their homes now. They are buried in the post cemetery.

Senator WADSWORTH. This language would then read: "For interment or preparation and transportation to their homes of the remains of civilian employees of the Army in the employ of the War Department who die abroad, in Alaska, in the Canal Zone, or on Army transports, or who die while on duty in the field, or at military posts within the limits of the United States," etc. That is the way you would have it read?

Major DALY. Yes.

Senator WADSWORTH. That would authorize you to pay the expense of transportation to their homes?

Major DALY. Yes, sir; if their relatives called for the bodies. You see, it is done for the civilian employees who die in the field or die on transports.

Senator WADSWORTH. Yes; that is a different matter, though, is it not, Major? Why should a civilian employee of the War Department, in the event of death, be transported to his home any more than a civilian employee of the Interior Department or of the Agricultural Department?

Major DALY. Well, I can not say that they should be given any greater privilege.

Senator HARRIS. Is there not this difference, Mr. Chairman, that these men in the employ of the War Department are sent all over the country more than other employees of the Government in other departments?

Senator WADSWORTH. They are not transferred so very, very often.

Senator HARRIS. Employees of the Interior Department are usually selected in the communities where the work is being done. Of course, there are exceptional cases.

Senator WADSWORTH. I am referring to civil service employees.

Major DALY. Of course, the act as it now stands provides for the transportation of all those who die away from stations. This only takes care of those who are assigned to permanent posts, and, of course, that class of employees does not differ from the Interior Department employees or Agricultural Department employees or any other employees of the Government. This suggested addition to existing legislation simply restores what has appeared in previous appropriation acts under this head, but was omitted by the House from the language of the proposed appropriation for fiscal year 1923.

General ROGERS. I think there might be this said, Mr. Chairman, in regard to that as to whether an employee that dies at a military post should be so disposed of. In the majority of cases such an employee dies in the post hospital, and I imagine it is rather embarrassing, unless they have funds, to handle the case. You see, it is

right on the military reservation, and the employee of the Interior Department who died would not be, of course, on a Government reservation, and his friends would take care of the body.

Senator WADSWORTH. I was not questioning the propriety of the interment on the post in the post cemetery, but I was questioning the propriety of transporting the body to a great distance, to a man's home, or where his home used to be, or where his relatives were then living.

General ROGERS. I do not know how much that would amount to. Do you know, Major Daly?

Major DALY. No; but it would not amount to much.

Senator WADSWORTH. It is not a question of the amount; it is a question of Government policy.

General ROGERS. I do imagine that the question of an employee dying in the post would have to be handled a little differently from the case of one who was strictly a civilian.

Senator WADSWORTH. I would consider a limitation along the line of changing that language so as to permit of the interment at the post of the remains of a civilian, but not to permit of the transportation of the remains.

General ROGERS. Just leave the transportation out, but only authorize the burial at the post?

Senator WADSWORTH. I think that transportation should be provided for for those that die abroad, in Alaska, in the Canal Zone, or on Army transports, or while on duty in the field. That is very different. But the transportation of the remains of a civilian employee who dies at Fort Myer, I do not think you would really have the same argument for that. That is my idea about it. My colleagues may differ with me.

Senator HARRIS. Mr. Chairman, those men are allowed to travel home, if they live, when their time expires.

Senator WADSWORTH. Civilian employees?

Senator HARRIS. Are they not?

Major DALY. Not in all cases.

Senator HARRIS. If the War Department sends a man to Washington State, and he goes out of the service there, is not his fare paid to his home?

Major DALY. Not unless he is under contract.

Senator HARRIS. That is what I mean, under his contract.

Major DALY. These people that we send over in the Graves Registration Service have a regular contract, and under those circumstances they have to be returned.

Senator WADSWORTH. Where you send them to a foreign country, that is understandable.

Major DALY. Except where people are transferred from permanent duty, they are not returned to their homes when they separate from the service or are taken from the service by reason of reduction of forces.

Senator WADSWORTH. The next item.

Major DALY. On page 108, line 8, we are asking to have inserted after "active list" "including civilian employees of the Army in the employ of the War Department who die abroad, in Alaska, in the Canal Zone, or on Army transports, or who die while on duty

in the field or at military posts within the limits of the United States."

Senator SPENCER. That raises the same question.

Major DALY. Yes, sir; that is, the last sentence of it does. That is asked for, Senator, in order to provide for the reimbursement of burial expenses paid by the relatives. The act approved March 24, 1921, authorized the interment or preparation for transportation to their homes of the remains of civil employees of the Army in the employ of the War Department who die abroad, in Alaska, in the Canal Zone, or on Army transports, or who die while on duty in the field or at military posts within the limits of the United States, but it does not provide for the reimbursement of individuals for burial expenses paid by them to the amount allowed by the Government. Reimbursement is authorized in the act in the case of officers and enlisted men.

This is brought up in connection with a storekeeper who died at Atlanta. The quartermaster there allowed a claim against the Government for the sum of \$85, the amount fixed by the Government as the limit of cost, and that was disallowed, and the Judge Advocate General held that the law did not authorize reimbursement. This clause is put in in order to provide for reimbursement in the event that the limit of cost fixed by the Secretary of War is paid by the relatives.

We have one other item, Mr. Chairman, on page 45.

Senator WADSWORTH. Just a moment before you leave that other.

As I read that paragraph disposition of remains of officers, soldiers, and civilian employees, the sum of \$75,000 is hereby made available during the fiscal year 1923, and the unexpended balance from the fiscal year 1922. What is the extent of the meaning of the phrase "for this purpose"? Does that mean the purpose set forth in the sentence immediately preceding or does it apply to the entire paragraph?

Major DALY. It applies to the entire paragraph.

Senator SPENCER. How much unexpended balance have you coming over from last year?

Major DALY. About \$6,000,000, as I recall it.

Major BROWNE. It is between five and six million dollars at this time.

Senator WADSWORTH. There is more than one purpose set forth in this paragraph.

Major DALY. Yes, sir.

Senator WADSWORTH. And the phrase "for this purpose" is used in stating the amount to be expended?

Major DALY. Yes, sir; but it has application to the entire paragraph.

Senator WADSWORTH. I would suggest we might use the phrase, "for the purposes set forth in this paragraph," or you may have trouble with the comptroller.

Now, on page 45.

CEMETERIAL DIVISION.

Major DALY. Yes, sir. Employees for the cemeterial division of the Quartermaster General's office. The total allowed by the House is

\$50,000. The total included in the Budget is \$50,000. But the Secretary of War, upon recommendation of the Bureau of Efficiency, recommended or authorized the Quartermaster General to ask for the \$62,270.

Senator SPENCER. Did the Budget approve that \$62,000?

Major DALY. I think not.

Senator WADSWORTH. Then, "for compiling, recording, preparing, and transmitting data incident to bringing home and disposition of remains from abroad"?

Major DALY. Yes, sir.

Senator WADSWORTH. Do I understand, Major, that the War Department is asking that the Budget amount be exceeded?

Major DALY. The Secretary approved the recommendation of the Bureau of Efficiency. They made an investigation of the Quartermaster General's office and made recommendations as to reorganization within the limits fixed by the Secretary of War for the total amount of money fixed by him, and they found that the cemeterial division could not efficiently conduct their work for the next fiscal year for the \$50,000 originally allowed and recommended an increase of something over \$12,000.

Senator WADSWORTH. But it has not been estimated for that amount?

Major DALY. No, sir.

Senator HARRIS. Has it passed the Budget?

Major DALY. It was never submitted to the Budget in the form of an estimate.

Major BROWNE. This investigation was made at the instance of the Budget Bureau with the concurrence and consent of the Secretary of War, and the report was made by the Bureau of Efficiency direct to the Director of the Budget.

Senator SPENCER. I suggest, Major, if you really think it is important, that you get the Director of Budget to make a supplemental estimate to allow \$62,000, or whatever the amount is, instead of \$50,000.

Major DALY. Yes, sir.

Senator SPENCER. We are not bound by the Budget, but we must follow it wherever we can.

Senator WADSWORTH. What next, Major?

INCREASE OF LIMITATION ON SALARIES.

Major DALY. The limitation on that page under the proviso beginning on line 18, which provides "that no person shall be employed under this allotment at a rate of compensation exceeding \$1,800 per annum, except one person at \$2,000." Limiting that sum to \$2,000 was an error on the part of the Quartermaster General's office, and it was not discussed before the House because it had escaped attention.

The man who is on duty at that office, Mr. Davis, who was formerly a lieutenant colonel, an emergency officer during the war, and who served in France, has been filling the position of the assistant or executive to the officer in charge, and the Quartermaster General presented the case to the Secretary of War, reporting his omission and asking for authority to take up with the Senate the question of increasing that amount from \$2,000 to \$3,000.

Senator SPENCER. Is that what he has been getting?

Major DALY. Yes, sir; and the Secretary has approved that request, so we desire to change the amount from \$2,000 to \$3,000.

Senator HARRIS. If he is a good man, he is worth it.

Major DALY. Yes, sir; he is worth a good deal more. He is simply staying here because he worked with the Graves Commission in Europe and wants to give the benefit of his knowledge to the Government. He is not intending to stay in the service, but is staying here at a sacrifice to himself now.

I think that winds it up.

Senator WADSWORTH. This last matter, you say, was not brought to the attention of the House committee?

Major DALY. No, sir; but since the hearings before the House committee it was brought to the attention of the Quartermaster General, and he took it up with the Secretary of War and the Secretary of War has approved his asking for the authorization of \$3,000 and taking it up with your committee.

General ROGERS. I think it is important that you authorize this amount to Colonel Davis. He has a very large knowledge of everything going on in that service, and if he could be kept on for one more year I think it would be in the interest of the service.

STATEMENT OF MAJ. GEN. M. W. IRELAND, SURGEON GENERAL.

MEDICAL AND HOSPITAL DEPARTMENT.

HOSPITAL CARE, CANAL ZONE GARRISONS.

Senator WADSWORTH. General Ireland, how do you do, sir.

General IRELAND. How do you do, sir.

Senator WADSWORTH. What do you want to call our attention to this afternoon?

General IRELAND. We have several items here—not very many. The first one is on page 55, the hospital care of soldiers in the Canal Zone garrisons.

The estimate for that care for this year was \$50,000, and the House has cut it down to \$40,000. Of course, that is an estimate. The appropriation for this year is \$50,000.

Senator SPENCER. \$60,000 for this year.

General IRELAND. \$60,000 for this year. The expenditure for the first six months, so far as it has been reported, was just short of \$20,000. Now, it is not known that all expenditures have been reported to that time, and I assume if \$40,000 is allowed on the basis of the expenditure for the first six months that does not give a factor of safety. That is just a normal expenditure, and I think \$50,000 ought to be allowed.

Senator WADSWORTH. It may be; I do not know, of course, that \$40,000 was decided upon by the House committee in view of their other provisions for the reduction of the Panama garrison.

General IRELAND. I believe they took that back.

Senator WADSWORTH. They did before the House?

General IRELAND. Yes, sir.

Senator WADSWORTH. They may not have corrected this item.

General IRELAND. The item was not corrected, sir.

Senator WADSWORTH. Do you really think, General, that \$40,000 is below the line?

General IRELAND. I think so; yes, sir. It does not give a factor of safety at all, and, of course, the commission must be paid for the care of our men; and, on the other hand, the money will not be paid unless the men are sick and cared for in the hospital.

Senator WADSWORTH. How much did you spend last year?

General IRELAND. That information is not here, sir; but during the first six months of this year the expenditures so far as reported when the hearings were had in the House were just short of \$20,000.

Senator HARRIS. Sickness is just the same at one part of the year as another, is it not? There is no reason why it should be greater in the first six months than in the last six months, is there?

General IRELAND. No; there is no particular difference; but just running along to the dollar it does not give any factor of safety for any little epidemic or increase of sickness whatever.

Senator WADSWORTH. All right, General, what is the next?

ARMY MEDICAL MUSEUM.

General IRELAND. The Army Medical Museum. The appropriation for that this year was \$10,000. The estimate of the officer in charge for next year was \$20,000, which was cut down in our office to \$10,000 and was passed by the Bureau of the Budget. It has been reduced \$2,500 in the House, which will not be sufficient to carry on that work during the year.

We have an immense amount of material from the war to prepare and mount, and the work can not be done for \$7,500, and we would like very much to have the \$10,000, which was the minimum estimate, Senator, in the estimate for the museum and the library, which we cut down in our office. It was taken into consideration that the effort was being made to economize, and we put it at the lowest possible figure.

Senator WADSWORTH. You have the same observation to make concerning the library?

LIBRARY, SURGEON GENERAL'S OFFICE.

General IRELAND. I have the same observation to make concerning the library. The estimate there was \$20,000, and we cut it to \$15,000.

Now, the Surgeon General's library is the largest medical library in the world and the most complete library of that kind in the world, and we can not carry it on with the amount of money they have given us. During the war a great many of the periodicals that we were subscribing for were disbanded and were lost to the profession. When the war began we were subscribers to over 1,900 periodicals. We are subscribing now for just a little over 1,600, and that number is increasing all the time. If we are to continue this as the medical library of the world we must have all the medical literature of the world. We can not continue it on that scale with that appropriation.

Moreover, the war threw on the market a great many private libraries. They are rare collections and every once in awhile we can pick up something that is of real worth to the library.

This library is not a local affair. It serves all the different activities of the Government; it serves the institutions of learning all over the United States, and it serves the profession all over the United States.

Senator HARRIS. In what way do you serve every institution in the United States?

General IRELAND. By sending them books and literature. It is a library that is known all over the world and it is catalogued in Europe as the S. G. O. library.

I sincerely trust you can put that back to \$15,000.

Senator WADSWORTH. Any questions you want to ask about that?

What is next, General?

OFFICE OF THE SURGEON GENERAL.

General IRELAND. The office of the Surgeon General. In 1914 we had a complete office force of 134. In 1916 we had a complete office force of 146, and last year we were allowed 186. Now, that is a reduction from practically 1,800 clerks at the peak of the load in the war. We made that reduction ourselves.

Senator SPENCER. What was the peak of clerks in the war, General?

General IRELAND. Approximately 1,800.

Senator SPENCER. Last year you had how many?

General IRELAND. One hundred and eighty-six. Now, we made that reduction ourselves, Senator, as the time went along; and when I came before this committee last year I accepted exactly what had been given us by the House. We have not discharged a clerk on account of an act of Congress or an order of the Secretary of War since a year ago last March, and during the efforts made to cut down the clerks in the War Department since the present Secretary of War came in we have not been required to cut down a single clerk. In other words, I think it is reasonable to believe that they recognized that we have cut down our force to the minimum number. Now, our estimate was for a personnel of 187.

Senator SPENCER. That is one more than last year?

General IRELAND. Yes, sir; we ask for one more additional principal assistant in the library, and that was passed by the Budget Bureau, but the Budget cut off three of our personnel. They cut off a chief messenger and two \$1,000 clerks, so we came to Congress with an estimate of 184. This gives us 169. Fifteen have been cut off.

In the personnel of the Surgeon General's Office they have cut off two \$1,800 clerks, which I will come to.

Senator SPENCER. That is class 1?

General IRELAND. Yes, sir.

Senator SPENCER. They have given you 15. How many did you have?

General IRELAND. Seventeen. They have cut off three \$1,400 clerks.

Senator SPENCER. They have cut off two \$1,800 clerks?

General IRELAND. Yes, sir.

Senator SPENCER. And how many of the class 3?

General IRELAND. Three \$1,400 clerks.

Senator SPENCER. Is that class 3?

General IRELAND. Class 2, sir. They cut off three of class 2 and eight from class 1.

Senator SPENCER. That is from 63 to 55?

General IRELAND. Yes, sir; that is right.

Now, in the hearing before the House Colonel Wolfe, who represented the office, asked them to cut out two \$1,000 clerks and reinstate two \$900 clerks, which they did. That accounts for that discrepancy there.

Over in the library among the specialists——

Senator WADSWORTH. Just a moment, General. I got a little confused about these clerks in the different classes. Specifically what amendments do you want made to this paragraph?

General IRELAND. I would like the two \$1,800 clerks put back.

Senator WADSWORTH. You want that to read 17?

General IRELAND. Yes, sir.

Senator WADSWORTH. Now, the next.

General IRELAND. And we would like to have the three in the \$1,400 class put back.

Senator SPENCER. Class 2?

General IRELAND. Yes, sir; and we would like to have the eight in the \$1,200 class put back. That would give us our 15 clerks there.

Senator WADSWORTH. Are you asking for a principal assistant librarian?

General IRELAND. Yes, sir; we ask for a principal assistant librarian. That is a new position, Senator. There were two principal reasons for asking for that—first is on account of the size of the library and its importance, and, second, to have an understudy for the first principal assistant librarian, and that item was passed by the Budget officer. It is a \$2,000 position and he must be a graduate in medicine as well as qualified in library work and must be obtained, of course, from the civil service. That was cut out by the House.

Senator WADSWORTH. Well, they leave you one principal assistant librarian at \$2,250?

General IRELAND. Yes, sir; we have had him for many years.

Senator WADSWORTH. Then you want another one of the same kind?

General IRELAND. At \$2,000; yes, sir.

Senator WADSWORTH. Then there are two principal assistant librarians?

General IRELAND. Yes; at different salaries.

Now, among the translators——

Senator SPENCER (interposing). Why do you not call your second man something else? You have a librarian, an assistant librarian, and principal assistant librarian.

General IRELAND. We are coming to that in a minute.

Senator SPENCER. And you will have a second principal assistant librarian if you get him?

General IRELAND. I tried to get an assistant librarian and I want to tell you what they did to us.

Senator WADSWORTH. Go ahead.

General IRELAND. Among the translators in the library we have had two for a good many years. One of them is an accomplished translator and he is an accomplished librarian. He is known throughout the United States as an accomplished man. More than that, he knows a great deal about the purchase of books, and the librarian asked that his designation only be changed to assistant librarian. It was just to give him a different position from a translator, a more important position in the eyes of the people that he

deals with than a designation as a translator. There was no increase of pay whatever—\$1,800—just wanted to change his designation. The House not only declined to change his name but they reduced the translators by one. They abolished his position.

Senator WADSWORTH. In that line 19 they only provide for one assistant librarian.

General IRELAND. One translator we are talking about. They, however, provided that one assistant librarian, instead of two, but they only provide for one translator.

Senator WADSWORTH. You wanted it to read two assistant librarians, did you not?

General IRELAND. Yes; at \$1,800. It was just a change of name; it was not to cost a cent. They not only declined to change the name but they abolished the office. Now, I think, that was all an error of understanding.

Senator WADSWORTH. How do you want it to read now in line 19? Do you want it to read "two assistant librarians"?

General IRELAND. Yes, sir.

Senator WADSWORTH. And leave it one translator, as it is?

General IRELAND. Yes, sir.

Senator WADSWORTH. And hereafter you will call him "assistant librarian"?

General IRELAND. Yes, sir.

Senator WADSWORTH. At the same pay?

General IRELAND. Yes, sir; \$1,800 a year. Not only the same pay but it will be the same man. But in the effort to give this man a rather more important position with the people he deals with without changing his pay, we have apparently lost his position.

Senator WADSWORTH. All right.

DISPOSITION OF REMAINS OF OFFICERS, SOLDIERS, AND CIVILIAN EMPLOYEES.

General IRELAND. Page 107, under the disposition of remains of officers, soldiers, and civilian employees, line 15, may we change "acting assistant surgeon" to "contract surgeon"? It will then read "contract surgeon" instead of "acting assistant surgeon." We have not had acting assistant surgeons for many, many years. It is an old designation.

In the same line, right after the word "surgeons," insert "members Army Nurse Corps."

Senator WADSWORTH. Have you ever had that authority before?

General IRELAND. No, sir.

Senator WADSWORTH. The Army Nurse Corps?

General IRELAND. I believe not, sir. It is just exactly as Major Daly said awhile ago, they have been taking care of them as civilians.

Senator WADSWORTH. I see.

General IRELAND. But they have a different status now.

Senator WADSWORTH. They have an Army status now?

General IRELAND. Yes.

MEDICAL DEPARTMENT.

ARTIFICIAL LIMBS.

General IRELAND. On page 110, under Medical Department, beginning at line 9, they have allowed \$35,000 only. The estimate approved by the Budget was \$40,000.

Now, the payment for artificial limbs comes in three-year cycles; this year and next year will be the smaller years, and the third year is the large year.

Senator WADSWORTH. Why is that?

General IRELAND. Because they are entitled to this artificial limb every three years under the law.

Senator SPENCER. Do they wear out in three years?

General IRELAND. They are entitled to either the artificial limb or the commutation therefor. The answer is no; they do not wear out every three years, but that has been the rule for many, many years.

Senator SPENCER. In other words, if a man has an artificial limb for three years he can have his commutation?

General IRELAND. If it lasts 25 years he can ask for an artificial limb or for his commutation.

Senator WADSWORTH. Is that any ex-soldier?

General IRELAND. Who lost his leg in the service before the World War.

Senator WADSWORTH. The World War is taken care of under the Veterans' Bureau?

General IRELAND. Yes, sir.

Senator SPENCER. Why should we not change that to let him have an additional artificial limb when, in the judgment of the Medical Department, he needs it?

Senator WADSWORTH. That would probably involve inspection.

General IRELAND. That would probably involve more expense than the present law. It would involve the process of inspection and the transportation to where he could be inspected, and these bills are decreasing very rapidly. This has been the law for many, many years. I do not know why they put it at three years. Probably when the law was passed they had not arrived at the perfection they have now of producing artificial limbs.

Senator SPENCER. Supposing the soldier who has an artificial limb meets with an accident and his artificial limb is destroyed, he can not get another until three years are up?

General IRELAND. No; he must repair it himself. If a man gets one to-day and it is broken next month he must repair his own limb.

Senator LENROOT. How long will a modern limb last him?

General IRELAND. I could not say, but much more than three years.

Senator LENROOT. Could not that term be extended?

General IRELAND. Senator, the number of men being compensated under this law is diminishing very rapidly. This is an odd year and we have reduced it by 25 per cent from the opposite year in the three-year cycle, 1920.

Senator WADSWORTH. Do you think \$35,000 is insufficient?

General IRELAND. I think so. And this is a claim against the Government. If the claim is presented this man has a right to his money. If it is not presented, of course, the money can not be paid. Now, the estimate was a very close one and I think \$40,000 ought to be inserted.

Senator HARRIS. These limbs last longer now, so why could we not make that six years or five years?

Senator WADSWORTH. You can not do it in this bill, Senator.

General IRELAND. I really think that would be inadvisable, because this law has been in force for many, many years and, as I just said

to the Senator, the number of men who are compensated under this law is diminishing very rapidly.

Senator SPENCER. It applies mostly to Civil War veterans?

General IRELAND. Yes.

Senator SPENCER. They will all be dead before a great many years.

General IRELAND. It goes back to the Civil War veterans, but it comes up to before the World War.

Senator LENROOT. How about now?

General IRELAND. That is taken care of by the Veterans' Bureau since the World War.

Senator SPENCER. If a man in service now in one of the posts in the line of duty loses a leg, does the United States Veterans' Bureau take care of it?

General IRELAND. That is as I understand it.

Senator LENROOT. Does the Veterans' Bureau take care of future disabilities in the Army?

General IRELAND. I think so. If that is not the law I will let you know, Senator, right away; but I am quite sure it is so.

Senator LENROOT. It may well be, but it is news to me.

General IRELAND. I will correct it and bring it to your attention if it is not correct.

Senator HARRIS. You want \$40,000?

Senator SPENCER. \$40,000 instead of \$50,000?

General IRELAND. We have a law man here and he says it is section 13 of the last Veterans' Bureau act.

Senator WADSWORTH. All right, General.

General IRELAND. The next two items are as estimated.

MEDICAL AND SURGICAL HISTORY OF THE WORLD WAR.

General IRELAND. The medical and surgical history of the World War. I would like your permission to make a little explanation of that on account of the understanding I had with the chairman of the Appropriations Committee when we got our first appropriation.

I came to the chairman and asked for this appropriation of \$150,000 to produce a medical and surgical history of the war. I told him that \$150,000 was an estimate. He was sympathetic, but asked me very frankly what the ultimate cost was to be, and I remarked that no one could tell, but I believed very thoroughly that \$150,000 would see us well on the way to the completion of the history. Upon that statement we received \$50,000 the first year and \$50,000 the last year. Now, by the end of this calendar year we will have produced 6 of the 15 volumes. We estimate that by the end of the next calendar year we will produce 5 more and probably 6 more of the 15 volumes, and we certainly can prepare the next 3 volumes during the next calendar year; that would be 1924.

Up to date we have expended for personnel in producing the work so far—that is, to June 30 of this year—\$41,986. Our pay roll to-day is \$20,800 a year for this work. We are going to reduce that \$4,200 before the 30th of June. So the estimate for next year will be \$16,600. We will reduce that by \$1,600 next year, so the estimate for the next year will be \$15,000, or, in other words, \$73,586.

Now, the estimate for the next year, 1925—and it is certainly an estimate—will not be to exceed \$10,000. That will make the personnel for producing the history of the war \$83,586.

The estimate for producing—that is, printing and binding—the medical and surgical history of the war is \$120,000; that makes a total of \$204,000.

If you want to give a liberal estimate for incidentals that may occur of \$6,000, the total estimate for the production of the medical and surgical history of the war by the end of 1925 will be \$210,000, which is \$60,000 more than just the guess was when we first asked for an estimate, and it was distinctly understood that that would see us well on the way to the production of this history.

Senator SPENCER. What do you want now?

General IRELAND. To remove the restrictions on the two appropriations we have already had of \$50,000; that is, continue them until expended for this purpose only.

Senator SPENCER. Is \$4,800 all you want for this year?

General IRELAND. No, sir.

Senator WADSWORTH. Well, you must have estimated the \$100 on the theory you were going to have an unexpended balance.

General IRELAND. We hoped that would be continued until expended.

Senator WADSWORTH. I do not understand. What was the estimate for this year?

Colonel WOLFE. The original estimate was \$100, but that was on the basis we would continue to use the civilian employees out of the Medical and Hospital Department, on page 54. The estimated expenses for the next year of \$20,800 would have been paid out of that appropriation under what we interpreted to be the decision of the Judge Advocate General authorizing us to make it a part of the field activity.

Senator WADSWORTH. On page 55, line 19, the House inserts the proviso, "*Provided*, That no part of this appropriation shall be used for payment of any expense connected with the publication of the medical and surgical history of the World War."

General IRELAND. Yes, sir.

Senator LENROOT. What do you say now will be your estimate of the total cost of this?

General IRELAND. \$210,000 at the outside. That would be at the end of 1925. The reason, Senator, I wanted to make this explanation here was to clear up exactly in the minds of the committee as to how we got started in this appropriation.

Senator LENROOT. Yes; but was not this limitation of \$150,000 put on from the start?

General IRELAND. No, sir; I would have to look back at the bill. It was in the first bill. I think that is correct.

Senator LENROOT. It seems to me when that limitation was on from the beginning it was the duty of the department to confine this work within that amount.

General IRELAND. Well, so far as that is concerned, we are well within the limitation now.

Senator LENROOT. I thought you said it would cost \$210,000?

General IRELAND. That is at the end of 1925.

Senator LENROOT. But this is the total cost—is not to exceed \$150,000?

General IRELAND. Yes, sir.

Senator LENROOT. Now you say it will cost \$210,000?

General IRELAND. Yes, sir. If we had been allowed to expend for personnel out of the medical and hospital appropriation we undoubtedly would have been within the \$150,000.

Senator LENROOT. This is the limitation Congress put on when they authorized this work, that it would cost the Government not more than a certain amount?

General IRELAND. Yes, sir.

Senator LENROOT. Namely, \$150,000?

General IRELAND. Yes, sir.

Senator LENROOT. Now I gather from what you say if the work would stop with the spending of \$150,000 you will have something very incomplete?

General IRELAND. Yes, sir.

Senator LENROOT. And you will be forced to go on with it if it is to be of value?

General IRELAND. What I wanted to explain very much, Senator, was that in my talk with the chairman of the Appropriations Committee I said that no one could estimate what the medical and surgical history would cost at that time. I thought I was sure, from what I knew, that \$150,000 would see us well on the way.

Senator LENROOT. That might have been, but here was a legislative direction, not an understanding with the chairman of the committee, allowing you to go into this work but with a limitation on the total cost.

General IRELAND. As soon as this appropriation was given we asked the War Department if we could employ clerks in my office under this appropriation, increasing the number of clerks in the office to do this work, and the answer was in the negative; it had to be a field activity. And we moved them out of my office into one of the field activities and employed a clerical force for it out of the medical and hospital appropriation.

Senator WADSWORTH. Have you had any estimate made for submission to the Joint Committee on Printing as to what the printing and binding of this is going to cost?

General IRELAND. In certain volumes. It is all done at the Government Printing Office.

Senator WADSWORTH. Yes; but of course the cost is dependent in some measure upon the size of type used and the character of the binding.

General IRELAND. There is one volume out now, printed and distributed. Senator, it is practically impossible to get an estimate now, because the last volume to be completed will be the surgical volume. We are dependent upon the professional men to do that, and we can not tell now and will not be able to tell until almost the time of presenting to the printer how many plates and charts and all such things as that will be required; and that has so much to do with the expense of printing.

Senator HARRIS. You say you have five volumes ready?

General IRELAND. We hope to have six. The material for six volumes we have to have completed by the end of this calendar year.

Senator WADSWORTH. The House appropriates \$4,800 for continuing this work, and that is all.

General IRELAND. That is all, and that is for the editor whose employment was authorized by the Secretary of War.

Senator WADSWORTH. Of course, I can not read the minds of the members of the House committee, because it is perfectly obvious that \$4,800 will not get you scarcely anywhere at all. I am wondering if by some chance they overlooked the fact that they had forbidden you to use any of the appropriation for Hospital and Medical Corps?

General IRELAND. They did that back here.

Senator LENROOT. I should imagine possibly what they had in mind was that the work would practically stop during the next year.

General IRELAND. I think it would be most unfortunate.

Senator LENROOT. I mean as to what might have been in the minds of the House committee.

General IRELAND. May I ask Colonel Wolfe to answer that question? He represented the department before the House committee.

Senator WADSWORTH. Surely.

Colonel WOLFE. Mr. Chairman, when I appeared before the House committee you will find the testimony beginning on page 958, in presenting a list of employees—the salaries of employees—Mr. Anthony was impressed with the salary that was being paid the editor in chief, \$4,800, and that led to the discussion of the use of the money and the appropriation of the Medical and Hospital Department, and it ultimately resulted in the prohibition appearing in this paragraph.

I submitted to this committee in a subsequent list the number of other employees who were on the work, but apparently that was omitted. They increased the \$100 to \$4,800, but did not make any change with regard to the other 12 employees who were on the list. I do not know what they had in mind, but the discussion was rather against the use of the money of the Medical and Hospital Department than the employment of civilian personnel to carry on the work within the limits of the appropriation.

Senator WADSWORTH. Just a moment. You say that Mr. Anthony seemed to be impressed with this \$4,800 salary for this editor?

Colonel WOLFE. Yes.

Senator WADSWORTH. Impressed favorably or unfavorably?

Colonel WOLFE. I will say rather unfavorably; that it is the largest salary paid an employee in our list, because the next one is \$2,500.

Senator WADSWORTH. For what purpose do you understand this \$4,800 is appropriated in this bill now?

Colonel WOLFE. For the pay of that editor, that one employee, as it states there; but by the prohibition, of course, it makes it impossible to employ any more clerks or to hire any other civilian employees than the editor.

Senator WADSWORTH. How many clerks have you?

Colonel WOLFE. Altogether there are 13 now, as the general said. The gross salary per annum is \$20,800. One clerk goes out the middle of next month, who is drawing \$1,800 a year; two clerks go out before the end of the year, who are getting \$1,200 each, leaving the editor

and stenographers and typists who are actually doing the mechanical preparation of this work, and one or two others who are getting the necessary documentation—that is, the papers in the offices of the Surgeon General and Adjutant General and wherever they are—to show the authority for making the statements which appear in the book.

Senator WADSWORTH. Have you any commissioned personnel to work on this?

Colonel WOLFE. There are three, I think, sir.

Senator SPENCER. Colonel, what is it you want here?

Colonel WOLFE. Either that the prohibition in the medical and hospital be removed or the wording of this be increased by striking out the words "services of an editor," on line 24, page 110, and insert "the necessary civilian employees," and increasing the amount at the top of page 111, on line 2, to \$15,000—that is, provided the previous appropriations be made continuing. They have not all been used. The appropriations for 1921 and 1922 have not and can not all be used during those years.

Senator SPENCER. Then you mean you want the power to use that unexpended balance?

Colonel WOLFE. We want the power to use the unexpended balance from the previous year.

Senator SPENCER. That is a separate appropriation. In other words, you have got to make your appropriation for a certain amount, including the unexpended balance, otherwise it goes back in the Treasury?

Senator WADSWORTH. Yes.

Colonel WOLFE. It is my understanding sufficient requisitions have been filed with the Government Printing Office to obligate the first \$50,000.

Senator WADSWORTH. You have another \$50,000 for this year?

Colonel WOLFE. But the \$50,000 for the current year can not be obligated in full.

Senator SPENCER. Can not be obligated?

Colonel WOLFE. We have not the material ready.

Senator WADSWORTH. You have got to present the figures that you are going to have left out of this \$50,000?

Colonel WOLFE. I thought it would be obligated before the year, but we find the volumes have not reached that state where it can be obligated.

Senator SPENCER. If that is true, do you need any unexpended balance, or can you just let it go until you get the material ready for next year?

Colonel WOLFE. I think we could get along without any increase in this appropriation provided the balances available for this year were continued.

Senator WADSWORTH. No increase over \$4,800?

Colonel WOLFE. Yes; provided you eliminate the words "services of an editor" and make it available so we can employ other civilian employees.

Senator SPENCER. Is that all you want, just to add after the words "including the services of an editor" the words "and other necessary civilian employees"? Is that all you want?

Colonel WOLFE. And the making of the previous appropriations continuous.

Senator SPENCER. \$50,000 at your disposal. When you say you do not need any large sum of money for printing or binding or anything else, why do you want \$50,000?

Colonel WOLFE. I do not think that we will need it, nor do we have any idea of expending it. It has already been appropriated.

Senator SPENCER. But it goes back into the Treasury and helps the Government out that much.

Colonel WOLFE. It helps the Government out, but we are out.

Senator SPENCER. When you need it next year, come in.

Colonel WOLFE. Under those conditions we would have to increase this by \$16,600 to cover the pay of employees.

Senator SPENCER. So that really what you want is to add after the words "including services of an editor" the words "and the other necessary civilian employees?"

Colonel WOLFE. Yes.

Senator SPENCER. And then change the \$4,800 to \$15,000?

Colonel WOLFE. If you make no extension of former appropriations it will have to be \$16,600.

Senator SPENCER. And that runs you along gathering material?

Colonel WOLFE. Yes, sir.

Senator SPENCER. But makes no appropriation for the production of the book itself?

Colonel WOLFE. For the Printing Office.

Senator SPENCER. And you will not be ready to print any in the next year?

General IRELAND. We will have six volumes ready by the end of this year.

Senator SPENCER. But you already have your money appropriated for and have obligated yourself under contracts.

General IRELAND. If all of this goes back I doubt very much whether we have enough to pay for that.

Senator SPENCER. But that that is already obligated for does not go back. Where an appropriation has an obligation against it that does not go back.

Senator LENROOT. How many volumes have been printed?

General IRELAND. Just one volume printed and distributed.

Senator LENROOT. How long has it been going—three years?

General IRELAND. This is asking for the third appropriation; it is going now into the third year.

Senator LENROOT. Would you be satisfied to have this prohibition removed permitting you to spend the money out of that \$1,000,000?

General IRELAND. If that prohibition is taken out.

Senator LENROOT. If you change that proviso so as to permit not more than the \$16,600 to be spent out of that sum then you will get what you want and can leave this at \$100?

Colonel WOLFE. This can be left at \$100 just to keep the appropriation alive.

Senator LENROOT. That will do it, I say, for your purpose?

Colonel WOLFE. I think so.

Senator SPENCER. That would be satisfactory?

General IRELAND. That would take us to next year.

Senator LENROOT. We could provide that not more than \$16,600 of this can be expended in connection with the medical and surgical history of the World War.

General IRELAND. Yes.

Senator LENROOT. And leave this at \$16,000?

General IRELAND. \$16,600.

Senator LENROOT. And you can spend, out of that \$1,000,000, \$16,600?

General IRELAND. Yes, sir.

Senator LENROOT. And leave this appropriation at \$100.

General IRELAND. Yes, sir.

Senator WADSWORTH. Anything else, General?

General IRELAND. I think that is all.

Senator WADSWORTH. General Lord, what topic is next?

General LORD. Transportation facilities, inland and coastwise waterways, Colonel Ashburn. Page 115.

STATEMENT OF COL. THOMAS Q. ASHBURN, ASSISTANT CHIEF, INLAND AND COASTWISE WATERWAYS SERVICE.

TRANSPORTATION FACILITIES, INLAND AND COASTWISE WATERWAYS.

Senator WADSWORTH. Colonel, what are these items you are going to call attention to?

Colonel ASHBURN. Page 115. The Inland and Coastwise Waterways Service is asking for \$330,000 to avoid being put up against a dilemma. The service is being operated by the Secretary of War under a mandate of Congress. There is also a mandate of Congress which says there shall be no deficit created.

The service is operating a barge line at the present time known as the Mississippi-Warrior River service, which is composed of two sections, one of which operates on the Mississippi River solely and another section which operates on the Warrior River. The two are connected by a link which operates between New Orleans and Mobile.

During the past year the Mississippi River section has made enough money to carry the expenses of the Warrior River, which is a very big money losing proposition. If any unforeseen accident should occur on the Mississippi River by which we lost some of our boats or lost a large part of our revenue, we might not be able to operate both sections and carry along the losses of the Warrior River unless we had an emergency fund which would be available to tide us over a temporary deficit.

In addition to the boats that are operating now there is a very great probability that the so-called Goltra fleet, which consists of 4 stern-wheel steamers and 19 barges designed for use on the upper Mississippi River, will be turned back to the Secretary of War on the 1st of May, this year. If this fleet is turned back it is mandatory upon the Secretary of War to operate it. There is no money available for any such operation.

Senator SPENCER. How big is that fleet?

Colonel ASHBURN. Four stern-wheel towboats and 19 barges of 2,000 tons capacity each.

Senator SPENCER. All right, go on.

Colonel ASHBURN. The idea which the service has in mind at the present time is this: The earnings on the Mississippi River are greater than the losses on the Warrior River. While we are carrying the Warrior River we are trying to build up the funds by which we can have some boats built which are suitable for service on the Warrior River. In the original design of the boats on the Warrior River they were intended to carry only bulk cargo—coal and things of that kind. We find that one of the biggest commodities we carry is steel. These wooden barges are not built for the handling of steel. We will try to accumulate enough money to have some good steel barges built and put in service on that section, and they would help the revenues of the Warrior River.

There are two or three reasons why the Warrior does not pay, which we think time will overcome. One of them is that the Warrior is circumscribed in the territory in which it can operate. The rulings of the Interstate Commerce Commission and the Railroad Administration were such that there are certain territories that we can not touch which would afford us very favorable commodities for handling if we had satisfactory joint rates. The matter is now before the Interstate Commerce Commission, and I expect that we will have a favorable decision some time in June.

The division of rates is also a strong factor in keeping down the earnings of both the Warrior and the Mississippi River. If we get approximately what we ask for as our share in rate divisions, I have no doubt that the earnings on both sections will be increased 25 per cent, but in the meantime it is necessary, in my judgment, as the operation of these lines is mandatory, to have a certain amount of reserve—which may or may not be touched—but which is available in order to avoid laying up all of this equipment just at the time when it is beginning to show that it is a very profitable investment. There is about \$15,000,000 invested in the Mississippi and Warrior section, and almost \$4,000,000 invested in the boats for the upper Mississippi.

Senator HARRIS. How high up the Mississippi River does that go?

Colonel ASHBURN. They have never operated, Senator. A contract was let in May of 1919 to build 4 stern-wheel steamers and 19 barges, the primary purpose of which was to move coal in one way and ore in the other. Before these boats were completed there was a contract entered into with a man by the name of Goltra, who had the exclusive right of operating this fleet for five years under certain conditions, which are determined in the contract. Although the preamble of the contract and the money given was for the specific purpose of operating on the upper Mississippi, yet in the body of the contract it provides that Mr. Goltra could operate on the Mississippi River or its tributaries. I think he realizes it is almost impossible to make any money on a line operating solely on the upper Mississippi, and he has never taken over the barges or towboats yet. Recently the Secretary of War has given him an ultimatum to the effect that, the towboats and barges being ready for operation, Mr. Goltra must take them over and operate them before April 30 of this year or the contract will be revoked. If the contract is revoked, the barges revert to the Secretary of War, who, under a mandate of Congress, is required to operate them on the upper Mississippi River.

Senator WADSWORTH. Now you want \$330,000?

Colonel ASHBURN. Yes, sir. I want \$30,000 of that to pay the office expenses in Washington. The service is not a part of the Army. There is no money appropriated for it any place else. We do not even get telephones. The law provides that it shall be operated in all respects as if it were a private corporation, so that all of the expenses of this office in Washington are paid out of any little fund we have here. That \$30,000 provides not only for the employees but for current bills that come in there, such as telephone, telegrams, mileage for various civilians who have to be sent out for auditing purposes, inspections, and things of that kind.

Senator HARRIS. You ask \$330,000?

Colonel ASHBURN. Yes, sir.

Senator HARRIS. And they gave you \$30,000 in the House?

Colonel ASHBURN. Yes, sir.

Senator WADSWORTH. In other words, the House declined to give you this emergency fund?

Colonel ASHBURN. No; I think the House gave us the money to keep up the office in Washington, Senator?

Senator WADSWORTH. I say they declined to give you the emergency fund?

Colonel ASHBURN. Yes; they did not give us any emergency fund at all. I did not quite hear your first remark.

Senator WADSWORTH. You have no miscellaneous fund now?

Colonel ASHBURN. We have about \$100,000 available in this way: When the New York canal section was sold and the intercoastal section was sold we got for the New York section \$1,000,000. Of that \$1,000,000 there has been \$100,000 paid in cash. There is \$75,000 which is due the 1st of July, which is bonded; \$75,000 due the 1st of January, which is bonded. The intercoastal section has paid in about \$30,000. Now, that makes quite a bit of money; but the New York canal was very heavily in debt. There was a lot of outstanding indebtedness we have had to settle. I think it is practically all settled. There is only a question of about \$25,000 or \$30,000 of claims against that section outstanding. This money we are going to get in will all go, under the law, toward the inauguration and development of other waterways, such as the Warrior, Mississippi, or, I think, the Ohio or Missouri. The law provides that the money we get from the sale of the New York and the intercoastal section shall come back to the inland and coastwise waterways to be available until expended. That makes a continuing fund, not a fund limited by an appropriation from year to year.

Senator WADSWORTH. Can you use any of that to meet an emergency?

Colonel ASHBURN. I think so.

Senator WADSWORTH. How much of that will you have during the next fiscal year?

Colonel ASHBURN. During the next fiscal year we will get in in the vicinity of \$225,000.

Senator WADSWORTH. Ordinarily, you would build more boats with that to go on the Warrior and Mississippi Rivers?

Colonel ASHBURN. Yes; I think it would be a very wise plan to build more boats on the Warrior. I do not think that we need them on the Mississippi if we get the Goltra fleet, and it is very plain

to me that we are going to get it—he does not show any indication of operating them at all.

Senator WADSWORTH. Do you not think that is enough money for the emergency for one year?

Colonel ASHBURN. Well, Mr. Senator, if they put on this line from St. Louis to St. Paul there is nothing in sight with which to pay for its operation. We would have to operate that line. It takes time to get business; and the people will not change established lanes of travel and ship by boat unless you demonstrate to them that you are going to establish and run a line permanently. You have got to create the habit of shipping. And I do not know that we could offer them such great inducements right now as to make them ship by boat from St. Paul, say, to St. Louis. The operation of a line on the upper Mississippi, to my mind, would be an expense for a considerable time, just like the Mississippi and Warrior have been, and as the Warrior still is.

Senator WADSWORTH. You think that will eat up some of the \$225,000?

Colonel ASHBURN. Yes; I think it would. Now, if this fund of \$330,000 is appropriated as an emergency fund by this Congress it is only good for one year; it will not extend over to another year. We want it an emergency fund. If we do not spend it it goes back into the Treasury; but, on the other hand, suppose we see we are going to run up a deficit—and I will explain to you how we can do its very easily—I would have to stop operating the line and get the President personally or the Secretary of War to get some authority for the line to continue to operate; but it would certainly stop until such authority was granted.

To show where a deficit might run up under the most normal conditions I will tell you what happened in New Orleans in December. In December we had 25 barges full of grain loaded down there. We only have about 40 barges operating. Each one of them was worth hundreds of dollars a day. They were full of grain, 50,000 tons. We ran against the longshoremen's strike there and could not load that grain on the ships in the harbor, and all the elevators in New Orleans were full of the grain we had taken down there. As the grain elevator was full and the longshoremen would not load ships awaiting cargo, due to their strike, we were compelled to keep 25 barges lying there idle for quite a period.

Senator SPENCER. Full of grain?

Colonel ASHBURN. Full of grain. We have more stuff than we can handle on the Mississippi River. To-day there are on the sidings at Cairo more cars of corn and wheat than we can handle for some time, and the only way a barge line like this can be made to pay is to keep the barges constantly moving. You can not hold them up. We lost in that time—in 10 or 12 days—a revenue I estimate to be over \$100,000.

Senator SPENCER. Suppose you had had \$300,000 in money then in the Treasury; how would that have helped it?

Colonel ASHBURN. It would not have helped then particularly, because I had money, but suppose I had not had any money in the Treasury and I saw this \$100,000 deficit looming up before me; what could I have done? Under the law I would simply have to say, "I'm sorry, but the law says I can not create a deficit."

Senator WADSWORTH. In other words, you want us to appropriate in advance for a deficit?

Colonel ASHBURN. Yes, and no. We need the money in case there is a deficit, but there may be no deficit.

Senator SPENCER. In case it occurs?

Colonel ASHBURN. Yes; it is an emergency fund; that is all.

Senator SPENCER. In other words, if we appropriate this \$330,000, it may be you would never use it?

Colonel ASHBURN. It might be we would never use it, and in my judgment I do not think we ever would—that is, not the \$300,000 emergency fund.

Senator HARRIS. What has been your appropriation in the different years since the act was passed?

Colonel ASHBURN. In the fiscal year 1921 we had \$4,000,000; in 1922 we had \$1,225,000; this year we are asking for nothing except an emergency fund.

Senator HARRIS. How did you come out last year in actual operating expenses against your income?

Colonel ASHBURN. Last year on the Mississippi River—

Senator HARRIS. I mean on the whole thing.

Colonel ASHBURN. We lost money on the whole thing.

Senator HARRIS. How much?

Colonel ASHBURN. I thought I had that here, Senator, but I apparently haven't the figures. I know we used out of this million and a quarter—that is what you are talking about, this last?

Senator HARRIS. Yes.

Colonel ASHBURN. We used out of that appropriation \$690,000, that we loaned out. That will come back; \$450,000 was loaned to the city of Memphis; \$200,000 loaned to the city of New Orleans; and \$40,000 loaned to the city of Vicksburg. Now, I have left in the appropriation to-day perhaps \$60,000. That accounts for \$750,000 of it.

I find the figures you asked for. The total money out of pocket on the two sections—Mississippi and Warrior—for the year 1921 was \$235,375.26.

Senator SPENCER. It cost you that much more money than your income?

Colonel ASHBURN. Yes, sir; this last year. Now, for the last three months this year on the Mississippi—these are in round figures, but they are very nearly exact—total revenue for January on the Mississippi alone was \$190,000.

Senator SPENCER. Net or gross?

Colonel ASHBURN. That is gross.

Senator HARRIS. What were the expenses?

Colonel ASHBURN. Total expenses, exclusive of depreciation, \$146,000. There was \$42,000 depreciation taken off, which left absolute net profit over and above all depreciation, \$2,000. The tonnage in January was 60,000 tons. In February the tonnage was 59,000 tons, and the total revenue was \$183,000, and the total expenses, exclusive of depreciation, \$139,000, leaving a balance in pocket of \$44,000. Of this, \$42,000 went to depreciation, leaving an absolute profit of \$2,000.

In March the tonnage was 55,000 tons, the total revenue was \$185,000, the total expenses \$140,000, exclusive of depreciation, leaving a profit of \$45,000, from which \$42,000 depreciation was deducted.

In other words, the service on the Mississippi River this year has made in three months \$7,000 over and above all depreciation, and the depreciation has amounted to \$126,000.

Senator SPENCER. Besides the expenses?

Colonel ASHBURN. Yes.

Senator SPENCER. Is the overhead included in the expense?

Colonel ASHBURN. Everything is included in that. The depreciation is so big, \$42,000 a month, that it is almost impossible to make any showing as a profit. The service is capitalized on the actual cost of war-time construction, and it is, on the Mississippi River, about \$10,000,000. We could replace the Mississippi equipment to-day for four or five million dollars, and we are charging off on this book, value of \$10,000,000, 10 per cent per year on wooden boats and 5 per cent per year on steel boats. If it were capitalized at what it is worth, \$5,000,000, instead of taking off \$126,000 depreciation in three months we would have taken off \$63,000, leaving \$63,000 to be applied to profit; and if we add to that our \$9,000 absolute profit, then the Mississippi section has made \$72,000 in the last three months.

Senator WADSWORTH. What is your rate of depreciation charged?

Colonel ASHBURN. Ten per cent per year on wooden boats and 5 per cent per year on steel boats. That is not the rate that the water-line accountants recommend be charged.

Senator WADSWORTH. What do they charge?

Colonel ASHBURN. They recommended an annual charge of 3½ per cent on steel boats and 5 per cent on wooden boats. The service has to carry it the way I have described because the Interline Association of Accountants has just recently recommended that thing, and its recommendations have not yet been adopted by the Interstate Commerce Commission. I do not believe that we can change our rate of depreciation without authorization of the Interstate Commission. The depreciation of 5 per cent and 10 per cent annually was set by the railroad administration.

Senator SPENCER. Colonel, if I get it right, you are absolutely prohibited by law from incurring any deficit?

Colonel ASHBURN. That is my understanding of the law.

Senator SPENCER. At least by order of the Secretary of War. I know that is his view. I do not remember the wording of the law. So if anything should happen, a strike, tie-up of your barges, that for a month or two compels you to lose money, no matter how bright the prospects for the future were, you would have to stop?

Col. ASHBURN. That is my understanding of the law.

Senator SPENCER. And in order to prevent that possibility happening you want this \$330,000 fund so if the necessity arises it will tide you over that temporary necessity?

Colonel ASHBURN. That is the idea exactly.

Senator WADSWORTH. Can you get along with less than \$300,000?

Colonel ASHBURN. I wanted more than that, but the Secretary of War said \$300,000.

Senator WADSWORTH. The Budget only allowed you \$300,000.

Colonel ASHBURN. The Budget allowed \$330,000.

Senator SPENCER. Do you charge the same rate as the railroads?

Colonel ASHBURN. No; the average saving per ton on every ton shipped by our line to the shipper is \$1.35 per ton.

Senator SPENCER. What is the average rate?

Colonel ASHBURN. That is 20 per cent saving. Our average rate is approximately \$4.39 per ton.

Senator SPENCER. That is what makes it mean so much to the Mississippi Valley, that all their transportation is being carried at 20 per cent less than the railroads charge, and the railroads can not handle it on account of the charge?

Colonel ASHBURN. It is my judgment that a large part of the agitation to get the St. Lawrence Canal project through is due to the fact that these people out in the West can not get all the transportation they want. I have not the exact figures, but I am certain over two-thirds of the grain from the Middle West and Northwest went through Montreal.

Senator SPENCER. Because they could not get the transportation?

Colonel ASHBURN. Because they could not get the transportation the other way.

Senator SPENCER. In other words, your idea is that if the Middle West and the Mississippi Valley had transportation southward the demand for the new St. Lawrence River Canal would be much lessened?

Colonel ASHBURN. I do not think there would be any from the Middle West to the Northwest if they had all the river transportation they want.

Senator SPENCER. I think there is a good deal in that.

Senator HARRIS. What do you haul principally?

Colonel ASHBURN. I have a list here.

Senator HARRIS. It is not necessary to go into details.

Colonel ASHBURN. Just the principal commodities?

Senator HARRIS. Yes.

Colonel ASHBURN. The principal commodities during the calendar year 1921 were agricultural implements and vehicles, 5,473 tons; cereal beverages, 6,196 tons; canned goods, 5,990 tons; corn, 85,017 tons—this is all southbound—cotton, 31,226 tons.

Senator SPENCER. From Memphis and those points south?

Colonel ASHBURN. Yes. Flour, 4,170 tons; iron and steel articles, 3,301 tons; molasses and sirup, 11,662 tons; starch, 5,604 tons; and wheat, 132,200 tons. All that is southbound.

Senator SPENCER. What northbound?

Colonel ASHBURN. Burlap and bagging, 24,955 tons; coffee, 14,291 tons; jute butts, 4,416 tons; molasses and sirup, 2,550 tons; nitrate of soda, 8,962 tons; ore, 8,307 tons.

Senator SPENCER. What ore is that?

Colonel ASHBURN. Bauxite. Oyster shells, 2,948 tons; empty packages returned, 1,176 tons; sisal, 33,997 tons; sugar, 16,145 tons.

There was carried downstream of principal commodities 288,803 tons and upstream 118,077.

In the month of March there was carried upstream 31,000 tons of freight, and 24,000 tons downstream. That is the first time in our history that the upstream tonnage has been greater than the southbound tonnage.

Senator SPENCER. Colonel, if you were to get those barges you think you may get the last of this month or the first of May, why is there not a reasonable prospect of carrying crude oil up the Missis-

issippi in sufficient quantity to equal practically all the tonnage you indicate here as northbound traffic?

Colonel ASHBURN. If we had had those barges this month we could have entered into a contract with the Procter & Gamble people, of Cincinnati, to carry 16,000 tons of whale oil imported for them, which would have been the first shipment of that kind by packet. If successful, the business would have grown. It would have been successful.

Senator SPENCER. That is to Cincinnati?

Colonel ASHBURN. Yes, sir; and to-day or yesterday I had a telegram or letter from the Indian Refining Co. asking me if I could carry all their oil downstream from some point in Illinois.

Senator HARRIS. Do you haul much coal on the Warrior?

Colonel ASHBURN. All the coal that our boats will carry. Coal is not a very paying commodity.

Senator HARRIS. Do you haul that 20 cents cheaper than the railway?

Colonel ASHBURN. No, sir.

Senator HARRIS. How much?

Colonel ASHBURN. Because there are only one or two mines that we can haul coal from now, and those mines happen to be controlled by the manager of the Warrior himself; he has asked us not to haul coal for less than the railroad rate. There is a big coal-handling plant being built down at Mobile, and as soon as that is completed we can begin and build up a vast quantity of reserve coal there so that a ship can come in and bunker right there. Ships will be able to load right from our place, and I think that is going to change the possibility of making money over handling coal.

Senator HARRIS. How much money have you up to the 1st of July?

Colonel ASHBURN. We have left this year \$58,000 or \$60,000. We would like to spend that. I have about \$100,000 in this revolving fund that has come in. There is perhaps \$120,000 there; but there are between \$20,000 and \$30,000 worth of charges at the New York Canal end which have not been adjudicated, and that has to be paid out of the money we have got for the bill. Perhaps \$50,000 will have to be returned to the Railroad Administration.

(Thereupon, at 5.25 o'clock p. m., the committee adjourned until to-morrow; Thursday, April 6, 1922, at 10.30 o'clock a. m.)

WAR DEPARTMENT APPROPRIATION BILL, 1923.

THURSDAY, APRIL 6, 1922.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10.30 o'clock a. m.

Present: Senators Wadsworth (chairman), Jones of Washington, Spencer, Hitchcock, and Harris.

Senator WADSWORTH. General Lord, what have we this morning?

General LORD. The Inspector General, page 14 of the bill—personnel in the office of the Inspector General, beginning with line 14.

STATEMENT OF COL. G. LeR. IRWIN, EXECUTIVE, OFFICE OF THE INSPECTOR GENERAL, WAR DEPARTMENT.

OFFICE OF THE INSPECTOR GENERAL.

SALARIES.

Senator WADSWORTH. Colonel Irwin, we shall be glad to hear you. What do you want to call to our attention?

Colonel IRWIN. In the House appropriation bill, Senator, the House has reduced the number of clerks by cutting out one of class 4—that is, one clerk at \$1,800. We now have two. One of these clerks has been 43 years in the service and the other one has been 16 years in the service. There has been cut out also 1 clerk of class 1, leaving us a total of 12, which is the number of clerks that we had before the war. We are allowed at the present time 14 clerks and 2 messengers, and the office can not function with a less number. In 1916 we had 12 clerks and 3 messengers. We made a study the other day of the amount of work that is being done in our office compared with what was done in 1916, and we find that it has increased by exactly 86 per cent.

Senator SPENCER. Colonel, you had 12 clerks before the war?

Colonel IRWIN. We had 12 clerks before the war.

Senator SPENCER. The House cut you down to 10?

Colonel IRWIN. No; they cut us from 14, that we have now, down to 12.

Senator SPENCER. Before the war you had 12 clerks?

Colonel IRWIN. We had 12 clerks and 3 messengers.

Senator SPENCER. And the work of the department has now increased 86 per cent?

Colonel IRWIN. Eighty-six per cent, we find, from the number of papers handled.

Senator WADSWORTH. Eighty-six per cent as compared with what?

Colonel IRWIN. As compared with 1916.

Senator WADSWORTH. How many messengers have you now?

Colonel IRWIN. We have two. We had three before.

Senator SPENCER. But you can get along with the two?

Colonel IRWIN. We manage to get along with the two; yes, sir.

Senator WADSWORTH. In the event that the House figures stood, you would have to drop the clerk who has served 16 years, would you not?

Colonel IRWIN. Yes, sir; or else reduce him in class, which would cause a reduction of a clerk of the next lower class. This would necessitate reductions in all grades. We are now short one clerk at \$1,000.

Senator WADSWORTH. Do you find that your office has to indulge in overtime very often?

Colonel IRWIN. The clerk I was just speaking of works overtime a great deal in the finance part of the office. He works until 6 or 7 o'clock, and sometimes comes back in the evening. He handles accounts of the soldiers' homes and a great deal of that finance matter. It takes a great deal of work.

Senator WADSWORTH. Have you anything more to say about that office situation?

EXPERT ACCOUNTANT.

Colonel IRWIN. Senator, we have one man who is not carried on this list who is an expert accountant. He receives a salary of \$2,500 a year, and is paid, of course, from the appropriation for the support of the Army. His salary has not been increased for years and years, and he does a work that is very valuable, and he really deserves more than he is getting. Outside he would be able to get a great deal more than that. He is an expert accountant. He is really a man that earns his pay. We sent him down just the other day when we found out that there was something wrong with the accounts of the finance officer at El Paso. He went down there, went through the entire account, and rendered a report explaining the discrepancies and errors. He is a man who can do a very important kind of work, and I think he is really very much underpaid. That is not included in this particular item, but it will come up later.

Senator WADSWORTH. Where is his salary carried in this bill?

Major BROWNE. You will find it on page 21, at line 13, under "Pay of the Army."

Senator WADSWORTH. Oh, yes.

Colonel IRWIN. He is an expert accountant.

Senator WADSWORTH. How long has he been there, Colonel?

Colonel IRWIN. Sixteen years in the office of the Inspector General.

Senator WADSWORTH. You know it is awfully hard to raise salaries at this time.

Colonel IRWIN. I know, sir; but I thought it was only fair to him that I should bring the matter up here.

Senator WADSWORTH. We are glad to know about it. What is your suggestion?

Senator SPENCER. What do you think ought to be done?

Colonel IRWIN. I should think he should be given \$3,500 instead of \$2,500.

Senator WADSWORTH. How long do you say he has been in the service?

Colonel IRWIN. He has been in the office for 16 years, but he was in the service before that. I think somebody told me the other day that he had been in the service something like 20 years.

Senator HARRIS. How long has he been getting this salary?

Colonel IRWIN. For the past 10 years.

Senator SPENCER. He has had no raise in 10 years?

Colonel IRWIN. No, sir.

Senator WADSWORTH. Is there anything else you want to call our attention to, Colonel?

Colonel IRWIN. Nothing, sir.

Senator WADSWORTH. Are there any questions? If not, thank you very much, Colonel.

Colonel IRWIN. Thank you, sir.

Major BROWNE. The next witness is General Walcutt, of the Bureau of Insular Affairs—page 57 of the bill.

STATEMENT OF COL. CHARLES C. WALCUTT, JR., ASSISTANT TO CHIEF OF BUREAU OF INSULAR AFFAIRS, WAR DEPARTMENT.

BUREAU OF INSULAR AFFAIRS.

SALARIES.

Colonel WALCUTT. Mr. Chairman, I want to urge the committee, if they will, to have in mind that the personnel of the Bureau of Insular Affairs was not increased during the war. I have here a table showing the reduction of the expense for the last 12 or 15 years, and I should like to urge that the estimate allotted by the Budget be put into the appropriation bill.

Senator WADSWORTH. Are you referring now to the office of the chief of the bureau?

Colonel WALCUTT. The office of the chief of the bureau; yes.

Senator WADSWORTH. I see that the House has reduced the class 4 clerks from 10 to 9, the class 3 clerks from 7 to 6, the class 2 clerks from 11 to 9, and the \$1,000 clerks from 10 to 6.

Colonel WALCUTT. Yes, sir.

Senator WADSWORTH. The laborers were estimated at one laborer, were they not, anyway?

Colonel WALCUTT. Yes.

Senator WADSWORTH. This year you have four laborers?

Colonel WALCUTT. Yes; we have four now. We were allotted one by the Bureau of the Budget, and the estimate contained in the Budget as reported to Congress was one. The estimate considered necessary by the investigator of the Bureau of Efficiency was two, and as the bill passed the House it had one. I should like to put in that memorandum, with your permission.

Senator SPENCER. What was your prewar need?

Colonel WALCUTT. In 1917 we had 56 clerks, 11 messengers and charwomen, a total of 67, and an appropriation of \$87,230. For the current year we have 53 clerks and 11 messengers and charwomen, a total of 64, with an appropriation of \$80,730.

Senator SPENCER. Was there any raise in 1917 over the two or three previous years?

Colonel WALCUTT. No, sir; just the same.

Senator SPENCER. That is, you had the same in 1914? You had 57 clerks?

Colonel WALCUTT. In 1914 we had a little more, and we had three more in the clerical division.

Senator SPENCER. Sixty.

Colonel WALCUTT. And the appropriation was \$90,230. I have here a table of the appropriations, beginning with the year 1905.

Senator SPENCER. Is it very long?

Colonel WALCUTT. No, sir.

Senator WADSWORTH. You might put that in.

(The table referred to is as follows:)

MARCH 31, 1922.

MEMORANDUM RELATIVE TO APPROPRIATIONS FOR SALARIES FOR EMPLOYEES, BUREAU OF INSULAR AFFAIRS.

The following statement shows the personnel of this bureau and the appropriations made therefor during the fiscal years 1905-1922.

Personnel.

Year.	Clerical.	Messengers and charwomen.	Total.	Amounts appropriated.
1905.....	58	11	69	\$79,800
1906.....	60	11	71	83,400
1907.....	63	11	74	87,400
1908.....	63	11	74	87,400
1909.....	60	11	71	87,400
1910.....	60	11	71	87,400
1911.....	62	11	73	91,000
1912.....	62	11	73	91,000
1913.....	62	12	74	91,840
1914.....	59	11	70	90,230
1915.....	56	11	67	87,230
1916.....	56	11	67	87,230
1917.....	56	11	67	87,230
1918.....	54	11	65	85,230
1919.....	54	11	65	85,230
1920.....	54	11	65	85,230
1921.....	53	11	64	80,730
1922.....	53	11	64	80,730
1923 ¹	45	4	49	60,030

¹ Carried in H. R. 10871, Army appropriation bill.

Senator HARRIS. Colonel, you have 41 messengers and charwomen for 56 clerks?

Colonel WALCUTT. Yes, sir.

Senator HARRIS. Is that not a rather large proportion? Do you need that many?

Colonel WALCUTT. I think we need all the clerks; yes, sir.

Senator HARRIS. I mean, the messengers and charwomen. Do you need them?

Colonel WALCUTT. Yes, sir; I think we do.

Senator WADSWORTH. Just a moment. How many have you today? Sixty-four, have you not?

Colonel WALCUTT. We have 64 all told. There are some vacancies. We have not filled any of the vacancies. We have several vacancies in the clerical force—three, I think—and one or two in the messenger force.

Senator WADSWORTH. How many does the House bill give you?

Colonel WALCUTT. They give us 45 clerks and 4 messengers and charwomen—49 altogether.

Senator HARRIS. They give you four messengers and charwomen?

Senator WADSWORTH. Three.

Senator HARRIS. You have 11 now?

Colonel WALCUTT. We have 11 there now.

Senator SPENCER. How does the work now compare with the work in 1917?

Colonel WALCUTT. It is fully as much, and I think just at present it is increasing. There is an increasing interest in matters in the Philippines and Porto Rico, which, of course, brings more work to the bureau?

Senator SPENCER. What is your greatest need? If some changes were made, what is your greatest need? What would be the first thing you would really need that is different from what the House gave you?

Colonel WALCUTT. If there is any reduction at all, I should ask that none of it be made in the higher grades. For instance, if this bill should be enacted into law as it is now, we would have to reduce one clerk, a woman who has had over 20 years' service there, very efficient and very competent.

Senator WADSWORTH. Is she the youngest in point of seniority?

Colonel WALCUTT. Yes, sir; in point of seniority. They are arranged in the order of efficiency, which is done every six months. She has just been promoted, and unless her rating is changed or her standing is changed at the end of June she would be the one to go down. Even if it was not she, it would be somebody of considerable experience. We have suffered a good deal, I think, from the changing personnel in the bureau. At the beginning of the war we lost quite a few of our older and more efficient and experienced clerks. Some of them went out as soldiers, and some went to other departments of the Government.

I have here a table showing the changes in the personnel for the last six or seven years, and it might be of some value in arriving at a conclusion.

Senator WADSWORTH. If you like, you can put that in.

(The table referred to is as follows:)

Resignations and transfers from the Insular Bureau, showing the length of service of employees for the years stated.

Year.	10 years to 18 years.	5 to 10 years.	4 years.	3 years.	2 years.	1 year or less.	Total.
1914.....		2		2		4	8
1915.....	2	1			2	3	8
1916.....	2	1			1	7	11
1917.....	4	2		3	2	9	20
1918.....	5	3	1	1	2	8	20
1919.....	1	2			3	11	17
1920.....	3	1		3	2	1	10
1921.....	2	1				6	9
Total.....	19	13	1	9	12	49	103

Senator WADSWORTH. Is there anything else that you want to emphasize under the general heading of "Bureau of Insular Affairs"?

Colonel WALCUTT. I simply want to emphasize this particular point—that the bureau did not expand during the war, and that the amount of work it is doing now is just as much as it was then, if not more. It is fully as much. I do not know that we do it as efficiently as we did, because the personnel has changed so much in the last few years; but a decrease now in the clerical personnel will impair the efficiency. If any decrease is absolutely necessary, if it is found that it ought to be made, it would be better if it were done in the lower grades, so that we will not have to reduce the salaries of some of the old, experienced clerks.

Here is a memorandum about the item of the insane soldiers—I do not know whether you care to have that or not—showing the appropriations for the last three or four years and the expenditures.

Senator WADSWORTH. I think it would be wise to have that; yes.

(The memorandum referred to is as follows:)

The following is a statement of appropriation and disbursements on account of insane soldiers for the fiscal years 1919, 1920, 1921, and the first half of fiscal year 1922:

Fiscal year.	Philippine Islands.		Porto Rico.	
	Appropriation.	Disbursements.	Appropriation.	Disbursements.
1919.....	\$1,000.00	\$952.60	\$100.00	None.
1920.....	2,000.00	1,587.30	100.00	None.
1921.....	2,000.00	1,716.28	100.00	None.
July 1 to Dec. 31, 1921.....	2,000.00	303.60	100.00	None.

SCOPE OF WORK.

Senator WADSWORTH. Generally speaking, what is the function performed by the clerical force of the bureau? Are you an information bureau for people who want to inquire about commercial conditions and financial conditions in the Philippines and Porto Rico?

Colonel WALCUTT. Yes, sir. Of course, a great deal of routine work is necessary in connection with answering questions from people in various parts of the country. We have a good deal of correspondence about teaching and other employment and about the opportunities for investment and occupation there. We have to make studies of all sorts of questions that come up in connection with the Government—financial, tariff, public-health, and various other questions that come up.

Senator HARRIS. Is the work growing less, Colonel?

Colonel WALCUTT. No, sir; it is growing more now.

Senator HARRIS. Why should it increase?

Colonel WALCUTT. The functions of the bureau are just the same, and just now, I think, we are handling a good many important matters in connection with the Philippines. Another thing we do is to try to keep in touch with public opinion, so as to be able to get the point of view out there at these different places. We try to watch legislation, both here and there, so as to keep them in harmony, especially any enactment by Congress as to its effect in the Philippines or

Porto Rico, especially in the Philippines; and anybody who is interested can have the benefit of the department's information.

Senator WADSWORTH. Does the chief of the bureau have any direct jurisdiction over the deposits of the Philippine government in the banks of the United States?

Colonel WALCUTT. The Secretary of War designates the depositories, and the Governor General can select from those depositories those that are branches of the Philippine treasury; and the Bureau of Insular Affairs is supposed to be the depository of information upon which any judgment is based.

Senator WADSWORTH. In a sense, you are a clearing house for information about the Philippines and Porto Rico, commercial, semi-political, etc.?

Colonel WALCUTT. Yes; and we try to keep in close touch with the Filipinos themselves. We represent them in a way, and the Porto Ricans also. I think any Filipino in this country who finds himself in difficulty of any kind would be very likely to apply to the Bureau of Insular Affairs for advice.

Senator WADSWORTH. Is there anything else you want to emphasize?

Colonel WALCUTT. No, sir; I think not.

Senator WADSWORTH. All right; thank you very much.

Colonel WALCUTT. Thank you.

Major BROWNE. The next witness is Colonel Griffin, of the Signal Corps, on the Office of the Chief Signal Officer, page 49 of the bill, beginning with line 5.

STATEMENT OF COL. FRANK J. GRIFFIN, OFFICE OF CHIEF SIGNAL OFFICER, WAR DEPARTMENT.

OFFICE OF CHIEF SIGNAL OFFICER.

SALARIES.

Senator WADSWORTH. What is it you want to emphasize, Colonel?

Colonel GRIFFIN. In the bill as presented, as compared with the estimate submitted by the office of the Chief Signal Officer and approved by the Budget, there are two rather vital changes. The first is the reduction of the total amount on line 8, page 49, from the original estimate of \$47,700 to \$41,900.

Senator HARRIS. That was approved by the Budget?

Colonel GRIFFIN. Yes, sir; that figure was arrived at. Following on line 5 of page 49 we asked for five clerks of class 4, and the bill as passed by the House gives us four. We asked for four clerks of class 3, which we have gotten. We asked for 9 clerks of class 2, and they gave us 7, a reduction of 2. We asked for 9 clerks of class 1, and they gave us 8, a reduction of 1. The other three items—three messengers at \$840, one assistant messenger at \$720, and 1 laborer at \$660—we asked for and received; so that while our original request was for \$47,700 under this which we call the statutory roll, the bill allots to us \$41,900.

SERVICES OF SKILLED DRAFTSMEN.

In discussing the situation it might be well to discuss the entire matter, and to do that we shall have also to consider this second provision, lines 9 to 20, inclusive, of page 49. That is a provision

which gives us the right to withdraw from other appropriations a certain amount of money for use in the office of the Chief Signal Officer in the way of payment of civilian employees. It is not an appropriation; it is merely the right to take money from other appropriations and expend it within the office of the Chief Signal Officer for salaries. That provision has been in existence for a very considerable number of years. For the last several years we have had \$40,000 instead of the \$20,000 mentioned on line 17. The organization of the office of the Chief Signal Officer has been based upon this particular combination of the statutory roll, lines 5 to 8, and the allotment roll, which is covered under lines 9 to 20, all on page 49. The reduction of the \$20,000 on line 17 from the original estimate of \$40,000 will be practically fatal to the office.

Senator SPENCER. How much did you actually spend out of that \$40,000 last year?

Colonel GRIFFIN. We spent \$39,000—almost the exact amount; just a little bit under. I might say that the object of this particular expenditure under lines 9 to 20 is to allow for a graded peak and depression in work. It is not an actual figure which we have to spend, but it is to provide for certain peaks of work. Sometimes we have more employees, and sometimes we have less; and therefore it is variable because of that fact.

Senator WADSWORTH. You generally spend pretty close to the full amount, do you not?

Colonel GRIFFIN. We have been spending fairly close to the full amount. I have a statement of the number we propose to hire next year to make our office practically stabilized.

Senator WADSWORTH. We should like to have that statement explained. Will you take that up?

Colonel GRIFFIN. I might say this by way of preface, if I may, not in criticism in any way at all: The effort of the House committee was evidently to put the Signal Corps on a par with its activities in 1914, 1915, and 1916; and in connection with that they seem to be working under a misapprehension, in that in 1914, 1915, and 1916 we had three rolls. We had a statutory roll and we had an allotment and then we had an additional roll. The exact amount of money that was received by the Signal Corps in 1914 for the office of the Chief Signal Officer was the sum of \$54,400—the actual amount in 1914, let me emphasize.

Beginning in 1907, the amounts for the office of the Chief Signal Officer were as follows:

1907-----	\$50,800	1911-----	50,800
1908-----	50,800	1912-----	50,800
1909-----	50,800	1913-----	54,400
1910-----	50,800	1914-----	54,400

Then we come along as follows:

In 1917 we received \$104,240; the same in 1918 and in 1919. In 1914—

Senator WADSWORTH. Just a moment before you start on that. Can you give the committee the figures for 1920 and 1921?

Colonel GRIFFIN. They are as follows:

1920-----	\$172,827
1921-----	127,963
1922-----	105,960

For the basis of a comparison between the years 1914, 1915, and 1916, which were practically similar, and the years 1922 and 1923, I should like to present facts as follows:

In 1914 we had in the Signal Corps 46 officers and 1,209 enlisted men. To-day our authorized strength is 300 officers and 3,000 men. It means that we are six times as large in officers and we are two and a half times as large in enlisted men.

In 1914 our appropriation—

Senator WADSWORTH. Just a moment. You say that is your authorized strength?

Colonel GRIFFIN. Yes, sir.

Senator WADSWORTH. What about your actual strength?

Colonel GRIFFIN. The total actual strength of the enlisted men is 3,000, right up to the maximum. The commissioned personnel is varying now. It is a little less than 200. I am afraid to give the exact figures. We have had one or two deaths lately. It is in the neighborhood of 195 to 200.

Senator WADSWORTH. All right.

INCREASE IN SCOPE OF WORK.

Colonel GRIFFIN. In 1914 our appropriation for the entire Signal Corps approximated \$250,000. The present bill gives us \$1,750,000, and there are certain other additions which we get which we did not have in 1914 in the way of expenditures of money for the various bureaus; among others the Coast Artillery and the fortifications, where we receive money from them to buy, our appropriations being merely for maintenance.

In the seacoast defenses we receive \$140,000 for the United States, \$25,000 for insular possessions, and \$10,000 for the Panama Canal, strictly for maintenance, and we spend a very considerable amount of money that we receive from the coast defenses for original installations, the purchasing of the matériel; so it will be seen that taking the figures only the Signal Corps is an entirely different organization from what it was in 1914. This growth has been a natural growth, due to the late war, wherein methods of communication with which the Signal Corps is charged have immeasurably increased. They have become more intricate, more technical.

As a sample of that, in 1914 our only radio apparatus of any character whatever was one type of pack set which had a limited use. To-day, I think, there are 35 different types of radio sets actually in use. These sets are not commercial sets. The ordinary commercial set is not available for military use, first, because it is not portable—it is too bulky, too heavy—and, secondly, because we have to have sets for particular uses, and ordinarily in some of those cases they are extremely short-range sets, and then, running into the longer ranges, the question of wave lengths is also of very considerable importance in our sets, in that we must not have interference on the field of battle.

In 1914 we did not have the handling of commercial telephone operations. In the year 1921 our commercial telephone operations amounted to over \$1,300,000. In the year 1922 they amounted to \$450,000. In the year 1923 the bill allots to us \$390,000 for the payment of commercial telephones.

TELEPHONE COMMUNICATION.

Senator HITCHCOCK. You mean those are expenditures by your service for telephone communication?

Colonel GRIFFIN. Yes, sir; we have the handling of all the telephone communication within the Army.

Senator HITCHCOCK. That is for the Army use of telephones, then?

Colonel GRIFFIN. Yes, sir.

Senator HITCHCOCK. That is enormous, I must say.

Senator WADSWORTH. In other words, you pay the bills incurred by them?

Colonel GRIFFIN. Yes, sir.

Senator WADSWORTH. Over commercial lines?

Colonel GRIFFIN. Over commercial lines. That includes the tie lines between our own Government-owned installations and also the rentals that we pay for telephone operations where we do not own the systems. The Signal Corps, I may say, under the bill—under the S. S. A. bill, the Signal Service of the Army, which is not under discussion now—is charged with the payment of telephone communication service within the Army. That excludes a certain amount of telephone service which is had by the departments in Washington, and which we do not pay for; but in the field we are responsible for the telephone service.

Senator WADSWORTH. In other words, if an officer with authority at Chicago were to telephone to Washington, you would pay that bill?

Colonel GRIFFIN. Yes, sir.

Senator HITCHCOCK. You have not any control of his doing so, though?

Colonel GRIFFIN. Oh, yes, sir; we exercise very, very strict control over it. We have had to. In our reduction from the year 1921, when we had \$1,300,000, to the current year, 1922, when we were reduced to practically \$450,000, and out of that \$450,000 we had to give a saving of \$45,000, making a net amount available for expenditure in 1922 of only \$405,000, we had to exercise the most stringent economy, and we really had to cut and abandon certain essential activities in order to bring the amounts within the appropriation. It meant cutting our telephone service over two-thirds.

Senator HITCHCOCK. Can you explain why the military service requires such tremendous haste that it has to spend this money for this instantaneous service? Why is not a 2-cent stamp or a franked envelope sufficient?

Colonel GRIFFIN. Under modern methods—I am speaking more as a business man now than as an officer—the telephone has come to be a necessity. Each camp, post, or headquarters of any organization, in order to operate efficiently, must have telephone service. Otherwise we would go back to the old days, where a 2-cent stamp, as you say, would do the communication; but it would do it at such an enormous waste of time that it would be impracticable to conduct business on that basis under present conditions.

In our purchasing or our interior communications, where within a post we have to have our telephone service—Washington Barracks, for example—it is hardly conceivable that we will go back to the old

method of sending a messenger with a written memorandum from one end of Washington Barracks to another, when by the use of the telephone which is on the executive officer's desk or upon the desks of the various responsible officers we can do business by telephone.

It is my personal conception, and I believe it is the conception of the Chief Signal Officer, that the telephone to-day is an essential in modern business; and when we consider the amount of money that is spent, when we consider the tactical operations, when we consider the possibility of the war needs—because, after all, we are here as a nucleus for war, and must be prepared for it—the telephone is taken as an essential proposition.

Senator HITCHCOCK. Your figures now you have got reduced to something like \$1,200 a day?

Colonel GRIFFIN. \$390,000, sir, is what we have to-day. Under the bill as proposed, we get a limitation of \$375,000.

Senator HITCHCOCK. That does not include telephone operators?

Colonel GRIFFIN. Oh, yes, sir.

Senator HITCHCOCK. We have them in other departments here. We have just passed over in the War Department an item where there are 13 telephone operators paid out of the appropriation for the office of the Secretary.

Colonel GRIFFIN. Yes, sir; that is my point. That is in Washington, sir. That is why I made the exception, as you will note, that we handle all field service, but we do not handle service in Washington proper.

Senator HITCHCOCK. So that that does not represent by any means all the telephone bills for the Army?

Colonel GRIFFIN. Oh, my, no, sir.

Senator HITCHCOCK. What proportion does it represent?

Colonel GRIFFIN. May I give in a few words the value, practically? We have 198 Government-owned telephone systems, the value of which is \$1,335,078. This is throughout the entire United States and insular possessions. In addition to that, we have 155 commercially owned systems which are operated and for which we pay in our various organizations. For example, there are certain cases where it is impracticable for the Government to own the installations.

Where it is possible, it is economy, and these installations have been either installed or else after installation during the war they were purchased by the Government and are now Government owned; and our expense in connection with them is really for tie lines and toll lines to connect them up with the outside world, and to give them connections into an exchange of the local companies, so that we can have communication with the world at large. The other 155, commercially owned, are in such locations that either through lack of funds or from the exercise of business judgment it is deemed unwise to purchase these systems, and therefore we rent them from the telephone companies.

I might say that we have an agreement with the telephone companies—what we call the May, 1921, agreement—by which we have rights that are not possible to the regular consumer. Those rights are obtained by us by reason of what we call certificate of military necessity; and that is the only theory under which the telephone

companies could give them to us, because if they made an exception in other instances than ours they would never have an end of it.

Senator HITCHCOCK. Can you give the committee the figures showing what proportion of this expense of, say, \$390,000 is on long-distance service?

Colonel GRIFFIN. I could, sir. I shall be very glad to give it to you.

Senator HITCHCOCK. As I recall, that was the biggest abuse that we discovered in the Army.

Senator WADSWORTH. That is when we cut them from a million.

Colonel GRIFFIN. I might say that that is one of the first things that was cut during the current year. The use of the long-distance call to-day is down to the absolute minimum. Any call that is put over the long distance to-day must be defended.

Senator HITCHCOCK. So that you think only a very small proportion of that \$400,000 is long distance?

Colonel GRIFFIN. Oh, yes, sir.

Senator HITCHCOCK. It is mostly local?

Colonel GRIFFIN. It is mostly local and trunk lines, sir. The charges in Washington, for example, of the telephone company are, I think, \$48 per annum for connecting trunk lines.

Senator HITCHCOCK. When you use tie lines, that is really a long-distance proposition; is it not?

Colonel GRIFFIN. No, sir. As a concrete example, in Washington Barracks we own our telephone system. That system is absolutely worthless to us except when it is connected with the telephone companies of Washington, and the line that connects our Government-owned switchboard in Washington Barracks with the switchboard of the telephone company here in Washington is what we call a trunk line. A tie line connects two private branch exchanges.

Senator WADSWORTH. You pay an annual rental for that?

Colonel GRIFFIN. We pay an annual rental for that; yes, sir.

Senator WADSWORTH. I suppose that is true of a large number of Army posts which are situated on the outskirts of a city, 10 or 12 miles away?

Colonel GRIFFIN. Yes, sir; every one of them, sir. That is the object of the May, 1921 agreement. The telephone company in ordinary conditions will not give to a business concern the right to install in its office building or factory building, whatever it may be, a privately owned switchboard, a telephone installation, and then to connect that privately owned switchboard with the Bell telephone system, for example. Their theory, as expressed by them, is that they are responsible for the service, and as such they must own and control the entire apparatus. With us, they have made an exception.

RATE PER TRUNK LINE.

Senator HITCHCOCK. The charge is \$48 per annum per trunk line, you say?

Colonel GRIFFIN. I believe that is it; yes, sir.

Senator HITCHCOCK. A month?

Colonel GRIFFIN. No, sir; that is per annum per circuit.

Senator HITCHCOCK. That is very small, then.

Colonel GRIFFIN. It is a reasonable amount; yes, sir.

Senator HITCHCOCK. Then will you put into the record, please, the amount of this \$400,000 that will probably be required for long-distance telephoning?

Colonel GRIFFIN. Yes, sir; I can give you exact figures for the first six months of this year, which I believe will be satisfactory, because the other bills have not come in. It takes practically two months to get the bills in from the companies.

Senator HARRIS. Would that long-distance amount be reduced very much if a number of the smaller posts were abandoned, and you had more troops concentrated?

Colonel GRIFFIN. I might say, sir, in answer to that question, that while, of course, every activity that goes into the discard will reduce the telephone bill, these long-distance calls have been so small in amount, and they are getting smaller even daily by reason of our radio net, which we will discuss later in the Signal Service of the Army bill—that I do not think they need be a matter of uneasiness under any conditions. I think when my figures are presented they will cover the matter very thoroughly.

Senator WADSWORTH. The Chief Signal Officer is not responsible for the expenditure of the money, is he?

Colonel GRIFFIN. Oh, yes, sir.

Senator WADSWORTH. The Chief Signal Officer, as such, has no power or jurisdiction over an officer of another branch of the service in the field using telephones?

Colonel GRIFFIN. Yes, sir; we have.

Senator HITCHCOCK. Does not that power emanate from the Secretary of War?

Colonel GRIFFIN. It is delegated, really, to the Chief Signal Officer to this extent, that as a part of my duties I am finance officer. In my allocation of funds to the various corps areas in America I allocate to each of them, each quarter, a certain specific sum for this purpose that is covered by our regulations. One of these purposes covers the payment of telephone tolls, payments to commercial telephone companies. The officer in charge of the area is absolutely prohibited from exceeding that amount. He, in turn, suballocates that money to the various activities within his control, and each of those suballocations carries with it also a very direct inhibition against the creation of a deficit. We feel very confident this year that we have lived strictly within the money allotted to us, and there can seem to be no possibility whereby that money will be exceeded; and in that way a check is kept upon all expenditures for telephone tolls, or other purposes such as that.

Senator WADSWORTH. Now let us bring the discussion back to the effect of this proposed cut on the general efficiency of the Chief Signal Officer.

INCREASE IN SCOPE OF WORK.

Colonel GRIFFIN. As a further item in connection with the comparison between 1914 and 1923, we had no meteorological section in 1914. We had no pigeon section in 1914. I have already referred to the extreme increase in radio. We had no photographic section in 1914. In 1914 we had nothing whatever to do with the payment of telegraphic tolls. That had always been handled by the office of

the Quartermaster General. In the bill for the fiscal year 1923 there is an estimate for \$150,000 for the payment of telegraphic tolls. This was originally estimated by the Quartermaster General at \$400,000. It was reduced to \$200,000 by the Budget officer, with our consent and approval, and after we went into the situation with our traffic experts in the telephone line we felt that we could reduce it still further, and in the hearings before the House committee we requested that that estimate be reduced from \$200,000 to \$150,000, that being expendable for payment of all telegraphic tolls within the Army. Next year we shall have that expenditure for the first time. It means an additional duty that is charged to the Signal Corps.

NUMBER OF EMPLOYEES.

This entire résumé of the 1914 duties is leading up to the fact that in the fiscal year 1922, the current fiscal year, we have in the office of the Chief Signal Officer a total of 73 employees. In 1914 we had a total of 52, with our minimized activities, with our small fund available for expenditure, with our officer personnel one-sixth of what it is to-day and our enlisted personnel almost one-third. In our original estimate we requested authority for the employment of 62 employees during the fiscal year 1923. That is a reduction of 11 from this year, and is only 10 employees in excess of what we had during the fiscal years 1914, 1915, and 1916, and running away back to 1906, 1907, or 1908.

STATUTORY ROLL.

These employees were assumed to have been paid out of two rolls. The first, lines 5 to 9, on page 49, we call the statutory roll, in which we requested authority for one chief clerk at \$2,000; five class 4 clerks, total, \$9,000; four class 3 clerks, total, \$6,400; nine class 2 clerks, total \$12,600; nine class 1 clerks, total, \$10,800; three clerks at \$1,000, total, \$3,000; three messengers at a total of \$2,520; one assistant messenger, \$720; one laborer, \$660; total, \$47,700.

ALLOTMENT ROLL.

The allotment roll which we requested, in lines 9 to 20, on page 49, and which I might again emphasize we have had for many years last past—it is no new legislation, and again I want to say it is not an appropriation; it is merely an authority to spend money already appropriated—we wish to expend for the following purposes.

One chief engineer, \$3,300; one civilian assistant, \$3,000; one draftsman, \$2,000; one assistant engineer, \$2,000; one radio draftsman, \$1,800; one clerk, \$1,800; one clerk, \$1,600; one allotment supervisor, \$1,500; eight clerks at \$1,400; total, \$11,200; eight clerks at \$1,200; total, \$9,600; one chief messenger, \$1,000; one mimeograph operator, \$1,200; total, \$40,000.

The total number of positions are 36 on the statutory roll and 26 on the allotment roll, a total of 62 positions. This \$40,000 that is covered in the allotment roll has been drawn by the office of the Chief Signal Officer from two appropriations; \$20,000 of it has been drawn from the appropriations for fortifications. We are charged

with the duty of maintaining the appropriations in all coast defenses. We are also charged with the duty of making purchases of original installations; but the latter case is covered by allotments of funds due us from the coast defenses, so that we do not use our own money in the purchase, but we do use it in the machinery by which the purchase is made. The work averages in excess of 25 per cent of our purchasing organization, including our warehousing and depots; and for that purpose we have deducted from the appropriation for fortifications \$20,000 payable to the employees in the office of the Chief Signal Officer as their proportion of the work done for fortifications.

The remaining \$20,000 we have taken from the appropriation, "Signal Service of the Army"; but even there, there is a limitation which seems to have been lost sight of, and that is this: It will be noticed that in line 23 of page 47 of the bill there is an appropriation or limitation whereby not to exceed \$475,000 from this appropriation may be expended for salaries and wages of civilian employees. Now, except for the provision on page 49, that money would have to be spent in the field, but the provisions in lines 9 to 20 on page 49 give us the right to spend up to \$40,000 of that money in the office of the Chief Signal Officer; so that when we take \$20,000 of the Signal Service of the Army appropriation we take it from that item of \$475,000. It is not additional appropriation for salaries of civilian employees, nor is it in that particular case the authorization of additional employees, because after the deduction of that \$20,000 we will then have only \$455,000 to spend in the field. I would like to emphasize that.

Senator WADSWORTH. Proceed; we understand that.

Senator HITCHCOCK. I do not quite understand how many employees you hold are necessary in the office of the Chief Signal Officer. Is that 62?

Colonel GRIFFIN. Sixty-two; yes, sir.

Senator HITCHCOCK. And the House gave you how much?

Colonel GRIFFIN. They gave us 31 under the statutory roll, and then \$30,000 worth.

Senator WADSWORTH. What does that \$20,000 amount to; how many employees?

Colonel GRIFFIN. Well, cutting this in half, which is impracticable, it would mean 13. For \$40,000 we get 26 employees.

Senator WADSWORTH. You would cut it a little more than in half, would you not?

Colonel GRIFFIN. We are hardly to be governed by the ordinary rules in that, sir, for this reason, that our branch is a strictly technical branch. Our principal duty to-day is in connection with radio, which has gone forward by leaps and bounds, and so far as the future is concerned it has only scratched the surface. Our employees, in that connection, must be high grade—that is, technically trained. We have got to keep up with the procession in civil life if we are to do anything whatever, and if we are not, we had better drop it all. A little is worthless, unless we are in the van, and for that reason the clerks that we have here are the minimum with which we feel we can conduct the business of the Signal Corps.

There has been so great a reduction already from past years to this, and even from this year to next, where we are dropping 11 clerks, that we feel we are getting into a very bad situation.

COMMISSIONED PERSONNEL.

Senator HITCHCOCK. From the statement you made some time ago, you indicated that since pre-war times the number of men in the Signal Service had increased two and a half times, but the number of officers had increased six times.

Colonel GRIFFIN. Yes, sir.

Senator HITCHCOCK. That is rather a remarkable disparity, is it not?

Colonel GRIFFIN. No, sir. I made that statement in connection with the authorization. The authorization is 300, whereas our actual number of officers commissioned is about 200. We had a possibly four-time increase instead of a six time; but the answer to that, sir, is this: In the old days signaling was done by wigwag. It was done by runners. This little set that we had, that we called our pack set, was to a degree an experiment, and it was the only thing that we had in the way of radio. We had a little telephone and a little radio, and that is all.

To-day telegraphing is the most technical branch in the Army, and to do that we have to have highly technically trained men, and our officers are essential for that purpose. Our divisions of officers are such that we are undermanned at the present time as to officers. I might say that there are at the present time perhaps 17 or 18 positions that ordinarily would demand the grade of a lieutenant colonel or colonel in the way of corps area signal officers and such, and there are not enough of that grade to fill those positions. We have some of our positions which are filled with the grade of major. They are all good men, but they have not the grade or the rank to which the positions entitle them.

We are constantly on the lookout for new officers. I have just this morning come down from Camp Albert Vail, which is our training camp, and we have up there a class of about 60 officers which we are endeavoring to train for communication purposes. Most of them are our own officers—younger officers.

We are even going so far as to send certain of our officers under our appropriation to the larger universities—Yale, the Institute of Technology of Massachusetts, and other institutions—and we have younger Signal Corps officers there who are being trained in the technical art of communication—telegraph, telephone and radio—and the more we get the better off we are.

Senator HITCHCOCK. What do the privates do? They are not radio operators?

Colonel GRIFFIN. They are radio operators, sir. A certain class of our privates—and by privates I assume that you mean the privates and noncommissioned officers.

Senator HITCHCOCK. Yes.

Colonel Griffin. The noncommissioned force—the enlisted force—are engaged upon the actual operation of radio, telephone, and telegraph. There are under instruction to-day up at Camp Albert Vail approximately 300 privates, or 300 enlisted men.

Senator HARRIS. How many officers did you say are there?

Colonel GRIFFIN. About 60 officers.

Senator HARRIS. And what is the rank of those officers? How many are there of the different ranks?

Colonel GRIFFIN. They run from captains to lieutenants, first and second. I do not know the exact grades.

Senator HARRIS. They are all young men?

Colonel GRIFFIN. They are all young men; yes, sir.

Senator HARRIS. How many have you at colleges under special training?

Colonel GRIFFIN. About 12, sir.

Senator HARRIS. Are they younger men, also?

Colonel GRIFFIN. Yes, sir; they are all young men. We are training our young men in this new branch. It has grown up like a mushroom, overnight.

Senator HARRIS. There have been advances of privates, also; where they were simply wigwagging, they have become operators of telephone, telegraph, and radio apparatus?

Colonel GRIFFIN. I would like to make a mental reservation with this statement that every one of our members of the Signal Corps, whether enlisted or commissioned, is a technician. He has got to be, to last and to make good, and if he does not make good we do not want him. We are specialists to so great a degree that practically every one of the officers and men in the Signal Corps is a specialist in communication or in the special duties of the Signal Corps.

Senator HARRIS. Are you not losing a great many of the non-commissioned officers as their terms of service expire? Can they not get better positions outside?

Colonel GRIFFIN. To a degree, yes, sir; but it has been observed that once it gets in their blood they stick. I would like to present another fact which will be presented to you later on, which will emphasize the question that the Senator has just put to me, and that is that Colonel Seoane, who is the officer in charge of the Alaska system, has operating that system officers and enlisted men of the Signal Corps entirely, and that is a system which, while it is wished on the Signal Corps, is something that we are operating because no one else can operate it.

Senator HITCHCOCK. Colonel, did I understand that this \$20,000 cut does not really reduce the appropriation any, but only changes—

Colonel GRIFFIN. The authority.

Senator HITCHCOCK (continuing). Changes the application of it?

Colonel GRIFFIN. Entirely, sir.

Senator HITCHCOCK. It does not reduce the appropriation, but only changes the application of the money.

Colonel GRIFFIN. That is the vital part of it. We always figure that we have got to lose, instead of 11 of our employees, based upon what we are now operating under, if we have got to lose 13 or 14 more of them, in other words, cutting our present organization in the office of the Chief Signal Officer practically one-third—it will be 28 out of 73—and in addition to that we have given to us additional duties over and above those even that we had last year and that we have this year, it will be very difficult to see how we can operate.

Senator WADSWORTH. That will be including the telegraph, will it?

Colonel GRIFFIN. Yes, sir; and these further duties that are coming in now, because of this enormous advance in radio.

Senator HITCHCOCK. Who will spend that \$20,000 if you do not?

Colonel GRIFFIN. We would spend it for other purposes.

Senator HITCHCOCK. You would not spend it if it was not put in here?

Colonel GRIFFIN. We would spend it for labor, for salaries, instead of spending it here. We would spend it in our office instead of spending it in the field.

Senator WADSWORTH. The \$475,000 allocated now on page 47 is for salaries and wages of civilian employees outside of Washington?

Colonel GRIFFIN. Yes.

Senator WADSWORTH. You want \$20,000 more of that taken and added to the \$20,000 on page 49, to be spent in the office of the Chief Signal Officer here in Washington?

Colonel GRIFFIN. Yes, sir; and with authority to draw on that \$475,000, to spend \$20,000 of it in Washington. The other \$20,000 we get from the fortifications bill. It means absolutely no increase or decrease in expenditure, merely an authorization to expend the money for salaries in a certain place.

Senator WADSWORTH. Are there any other questions?

Senator HARRIS, have you anything further?

Senator HARRIS. No.

Senator WADSWORTH. Senator Hitchcock?

Senator HITCHCOCK. I have nothing more.

Senator WADSWORTH. We are much obliged to you, Colonel. Is that all you have to call attention to?

Colonel GRIFFIN. Yes; I will, if I may, give those exact figures we spoke of.

Senator WADSWORTH. Yes; put them in the record.

STATEMENT OF COL. C. A. SEOANE.

WASHINGTON AND ALASKA CABLE SYSTEM.

Major BROWN. Colonel Seoane, of the Signal Corps, wants to speak on the Washington-Alaska Signal Corps System.

Senator WADSWORTH. Proceed, Colonel.

Colonel SEOANE. On page 48, line 24, should be added \$1,500,000, making a new total of \$1,640,000.

Senator WADSWORTH. Now tell us about this case.

Colonel SEOANE. This additional amount is to be used in replacing the worn-out portions of the Washington-Alaska Cable System. That cable system consists of 2,600 miles of single-strand conductor, which was installed over 19 years ago and which is at present in a badly worn-out condition, 95 per cent of the current escaping through the ground, because of abrasions and mechanical defects.

The number of messages daily transmitted in connection with this cable is of the greatest importance to the economic life of Alaska.

Careful investigations have been made to ascertain whether the expenditure could be postponed by the use for a time of wireless. Investigation discloses that the operations of the wireless to Alaska are subject to such great interruptions and are generally so unsatis-

factory that it is not regarded as economically practical to do without the use of the cable.

The radio business there, commercial business, amounted to approximately \$190,000 a year, while the Government communications carried free of charge, if computed at commercial cable rates, would practically double that amount.

The estimate herewith submitted represents only the actual cost of the cable, it being the intention of the War Department to perform, through its own agencies, the work of installation.

This is taken from the President's language in submitting this measure for the consideration of Congress on two occasions, one to this session and one in the deficiency estimate submitted last November.

Senator SPENCER. Is this cable used at all now, Colonel?

Colonel SEOANE. It is used now to such an extent that it is carrying about a million words a month. We are carrying ten or eleven million words a year over that cable. The cable is the primary factor in carrying on \$100,000,000 worth of business that passes between Alaska and the United States each year. The number of messages that pass over that cable is about 500 per day in the closed, frigid season, during the winter months. In the summer months the business that goes over that cable is more than double that. We reached the peak last August, when 1,100 messages passed in one day.

CONDITION OF PRESENT CABLE.

The cable is in such a worn condition that we expect it to go out at any time; and, besides that, the capacity, in the original design of the cable, was so low that it can only carry 24 words a minute, and we have to work 24 hours a day, every hour every day in the year, to keep the business going over that cable; and when it goes out, as it often does—we have breaks in the cable continually; the cable ship is going constantly making repairs—then the Navy helps with its extemporized radio system; but business just clutters up and mistakes occur and unsent messages pile up so that they get days behind. Things continue in a stew until we get the cable restored—then all life in Alaska, business life particularly, is happy once more.

Senator HITCHCOCK. Is that the only line of communication?

Colonel SEOANE. It is the only line of communication.

EXTENT TO WHICH RADIO CAN BE USED.

Senator HITCHCOCK. What disturbs the radio?

Colonel SEOANE. There are many points that are not yet known. For instance, a radio station at the Puget Sound Navy Yard, or anywhere in the vicinity of Seattle, can not reach Alaska, but if you go down to the mouth of the Columbia River, radio can reach Alaska. There are many questions that have not been analyzed scientifically and the answers to which have not been discovered.

Senator HITCHCOCK. There is a radio service?

Colonel SEOANE. There is radio service, but interruptions occur to such an extent—and the radio service, I wish to say, is only fragmentary as it is built, and it does not cover all of Alaska, and in

its fragmentary way it is subject to such interruptions—that it can not begin to take care of all the business.

Senator HITCHCOCK. Is there a powerful sending station in Alaska?

Colonel SEOANE. It is not powerful. There are several small stations.

Senator SPENCER. Does it carry the business that it can carry satisfactorily?

Colonel SEOANE. No; it does not carry the business that it can carry, satisfactorily. The business is just broken down, that is all. When the cable goes out, business just breaks down.

Senator HITCHCOCK. How much has been expended there for radio stations?

Colonel SEOANE. The Washington-Alaska Cable System has for many years had an appropriation of \$140,000. Out of those appropriations we have put in little stations and kept up repair of the other stations. In all, there have come into existence in Alaska 16 radio stations out of these annual appropriations, and to-day they carry on a great deal of the interior business. But I wish to point out that none of those stations are strong enough to take messages out of Alaska. The Navy, in connection with their coast defense work and keeping in touch with their coast operations, have a few stations in Alaska. They have one in Dutch Harbor, one in Seward, one at Cordova, and their stations are powerful enough to get to Seattle—or to get to the mouth of the Columbia River—under favorable conditions; and if the cable breaks down we have to ask the co-operation of the Navy, who are not fully hooked up to carry on this large commercial system; under a break extemporized work commences right away and goes on in a most unsatisfactory way. I am not mentioning that as criticism, but the system is so large, the amount of work that has to go on is so great, that unless one is "hooked up" for it, to use the commercial term, one can not carry on. For instance, if this telephone system goes out here in the city of Washington, one can not extemporize a system at once to carry on the same amount of work. It can not be done.

Senator HITCHCOCK. Is all the radio service there in the hands of the Navy?

Colonel SEOANE. All the radio service that reaches from Alaska to the United States is in the hands of the Navy.

LENGTH OF CABLE.

Senator HITCHCOCK. How long is that cable?

Colonel SEOANE. There is a total length of 2,670 miles of cable. We are asking for 1,000 miles of new cable which will cost \$1,500 a mile, which would reach from Seattle to Sitka, our intention being to put down this new cable and take out the old cable and overhaul it on our cable ship, using such portions of it as are still usable in toning up the remainder of the system.

Senator HITCHCOCK. What good would 1,000 miles of new cable do you, if you have still got another 1,600 miles of old cable?

Colonel SEOANE. It would do us a great deal of good, because from Seattle to Sitka is really the neck of the system. All the traffic passes through there. We need a larger cable. We need a cable that should

be consistent in its operation, and having a much larger capacity than the present one. From Sitka lines radiate in different directions. They are comparatively short lengths. One is 62 miles long, one is 94 miles long, another is 164 miles long, and so on; it would be our intention to overhaul the remainder of the old cable and repair it where there are bad spots, with pieces recovered from the cable we would take up. We might find pieces 20 miles long or even 100 miles long that would be usable. We could really make a new system out of it if we could put in 1,000 miles of new cable.

Senator HITCHCOCK. What would a radio system cost?

Colonel SEOANE. It would cost much more, and if we were to put in a radio system in place of the cable it would be against what has come to be the accepted technical and scientific opinion of the day. In the meeting at Paris last summer, at the radio communication conference, in which the United States was represented by its experts, the consensus of opinion was that cables will not go out of existence. General Squier, to-day, and Dr. Stratton and others will say that communication by wire or by cable, and communication by radio, will go parallel with each other, and that one will not displace the other. I might say in support of that that there are more cable projects under way in the world to-day than there have ever been in existence since cables were first laid. There are enough cable projects under way to-day to more than stretch around the globe. More than 25,000 miles of cable are being manufactured and put under way. Italy alone is putting down a 6,000-mile cable to reach from Italy to Buenos Aires. Germany is putting down two cables, in conjunction with the Western Union Telegraph Co., to take the place of the cables across the Atlantic captured from her. Great Britain is putting down two cables to connect with Canada. The British cable board, which is another name for the British Government, is going to parallel the cable that runs from Vancouver to Australia and New Zealand, which is also an 8,000-mile project, and which would take, I presume, around sixteen to twenty millions of dollars to lay down. It is one of the most expensive cables that was ever laid.

Mr. Mackay, president of the Commercial Pacific Cable Co. that operates the American cable across the Pacific, to-day is before the State Department asking permission to parallel their present cable across the Pacific Ocean, 10,000 miles, and which will represent \$20,000,000 to \$30,000,000, if the Postal Telegraph Co. can borrow that amount of money.

MATERIALS USED IN THE MANUFACTURE OF CABLE.

Senator HARRIS. Is the expense of the material now reduced greatly as compared with a year ago; and do you think there will be any great reduction in the next few months? Would we save enough by waiting to warrant us in doing so?

Colonel SEOANE. No, sir; copper has come down, which is one of the principal constituents in submarine cable, and has been down for 16 months. Copper has been down to 13 or 14 cents a pound, and that is its pre-war figure. Most of the copper companies, like the Anaconda, and so on, have ceased paying dividends, and no business man expects copper to go any lower than it is at present; so that I should say copper is back down to its bottom price.

Gutta percha, which goes into the manufacture of cable, is a very difficult material to estimate on. It always stays up in price, because the amount of it is not equal to the demand. It comes only in limited amounts, and it is a question of dealing and using the best business management possible to secure an advantageous purchase of sufficient gutta percha.

Senator HITCHCOCK. With all these projected lines, that would indicate that if you built an Alaska cable now for this 1,000 miles the cost would probably be inordinate, would it not?

Colonel SEOANE. No, sir; the figures we have obtained are based on foreign estimates submitted to us, on estimates submitted by cable companies here, on estimates made by our own engineers, and upon which General Russell, late president of our cable board, and General Squier, and our engineering force generally, agree that the estimate is about fair and could hardly be expected to be much better; we would be getting a very fair value for the amount of money expended.

ORIGINAL COST OF CABLE.

Senator HITCHCOCK. Do you know what this cable originally cost?

Colonel SEOANE. This cable cost about \$5,000,000. It was put in piecemeal, at different times, but there is an investment of \$5,000,000 there.

Senator HITCHCOCK. Two thousand six hundred miles?

Colonel SEOANE. Yes. The cable was a very small cable. It was put down first purely to answer questions of state. Mr. Root, then Secretary of State, was about to initiate questions having to do with the settlement of the Alaska boundary. He wished to establish physical connections between the United States and Alaska, in order to support his hand, and the cable was put down as a military necessity. As such it was of minimum size. It was never intended to carry on the business that it has been carrying on, and it was only intended for a minimum life. It was only calculated to have about a five-year life. The cable was constructed of rubber. The best cable experts told General Russell that they, under no circumstances, would advise rubber cable, and that they, in no way, would have their names connected with the project. In other words, the Signal Corps, nevertheless, went ahead and put that cable down constructed of rubber, and it has had a life now of 19 years. Its condition is such that it is likely to go out at any time, and there is no engineer who would establish connection with the cable, but would pronounce it junk. That is what it is to-day—junk. It has paid for itself, and it is certainly a back number.

Senator HITCHCOCK. These other lines you have spoken of are all trans-Atlantic lines, covering long distances?

Colonel SEOANE. Yes, sir.

Senator HITCHCOCK. Can not radio be applied there where it can not be applied across 10,000-mile jumps, or even across 3,000-mile jumps?

Colonel SEOANE. Well, the jumps are rather long in Alaska. Before you get to the southern coast of Alaska you have already gone 1,600 miles, and to Seward is about 1,700 miles from Seattle, and that is not considered a small distance at all. That southeastern line,

where that little narrow neck goes down to Ketchikan, is not so long, but the cable goes on to the remainder of Alaska.

Furthermore, the radio is making such remarkable progress to-day that those who are in scientific touch with the progress of the art say that its use will be restricted, that the Government will come to restrict the distribution of messages to those for general use, as distinguished from those for private use. This means that wires will be used for private messages. That is, they say that John Doe will not be permitted to use the radio to send his individual messages, because he might interfere with some message being sent at the same time that was of general public importance. Therefore, cables will come to be used more and more for private messages, and in order to keep them confidential also, and radio will come to be used for distribution of messages for the general public. We would be going in the face of the best technical thought of the day if we were to say that radio should take the place of a wire system.

Senator HITCHCOCK. Why should not this enterprise be left to private companies, if it is profitable?

Colonel SEOANE. It does not quite pay; and the day that it does pay, private companies will probably come and take it. But the Government has always been a pioneer in new places. The entire development of the West was carried out by the Government stepping in to assist various projects. In Alaska we are not yet on a commercially paying basis; and the moment that we were, the Government, in keeping with past policy, no doubt would step out and let the people handle this enterprise in their own way.

Senator HITCHCOCK. I understood you to say that this cable had paid for itself.

RECEIPTS FROM OPERATION.

Colonel SEOANE. It has paid for itself in the return it has made toward the upbuilding of Alaska and keeping people in touch with their homes and the service of the people who reside in Alaska. But in money, there have been applied different computations. It has paid, less the overhead of the military personnel who are employed upon the system. The cable system to-day returns more money to the Treasury than is expended annually for its upkeep; but if we were to take into consideration the salaries and pay of the 240 soldiers who are scattered over the system—and I have always argued that it should not be charged with that, because we do not charge to the Panama Canal the soldiers that are there, nor to the expense of the Mexican border the soldiers that are there, nor to the Philippine Islands the soldiers that we have there—why, the system pays for itself. If you take in the soldiers, with the expense for upkeep, it does not pay for itself.

Senator HITCHCOCK. Has any computation been made of what the corresponding radio service would cost to install?

Colonel SEOANE. It would cost more than—

Senator HITCHCOCK. More than that 2,600 miles of cable?

Colonel SEOANE. Yes, sir; to put in the stations that should be powerful enough to take the place of the cable I think would cost more than the cable.

I want to say one more thing. The cable system reaches the terminus of the present Alaska Railway. It is estimated by the chamber of commerce of Seattle and others who are in position to make estimates that the business passing over the cable—and our office agrees with these estimates—in the next five years will be two and a half times as large as the business is at present. We are taking in approximately \$200,000 in cash per annum over the system to-day, and we are appropriating \$140,000 per annum for upkeep. The Government business passing over the cable is about \$225,000 per annum, of which the War Department only figures one-fourth, the remaining Government business being that of the various Government departments, such as the Department of Justice, the Department of the Interior particularly, and the Department of Agriculture, and the Post Office Department. With an increase of two and a half times the amount of business, we will have a paying system there, bringing an excellent financial return, and I make no doubt that applications will be made to Congress or to the State Department that the system be turned over to commercial interests.

Senator HITCHCOCK. Would you say that if this million and a half is appropriated for reconstruction purposes, there would not be another request following it for reconstruction of the rest of it?

Colonel SEOANE. Oh, I can assure you that that would not be done. Senator HITCHCOCK. This would be all?

Colonel SEOANE. This would be all.

CONDITION OF THE PRESENT CABLE.

Senator WADSWORTH. Did I understand you to say that you are now losing 95 per cent of the current?

Colonel SEOANE. Yes; 95 per cent of the current escapes into the ground.

Senator WADSWORTH. You have been wasting some power there.

Colonel SEOANE. Well, the wastage in power is not very much, because the power over a submarine cable is very little. It is all put over by batteries. It is nothing more than storage batteries.

But that is not the point. The point is that there are so many leaks over the system that while, in a way, they are balancing themselves at present, and we are able to continue communication, those leaks may become so great that the whole thing will go out; and the leaks are so many and so generally distributed that there is no system of testing that could pick out their location. The cable is just junk. We are in wonderfully good luck that with all this leakage that goes on the electrical balance is maintained and communication is established. There is no repairing the thing.

Senator JONES of Washington. You expect that cable to go out at any time?

Colonel SEOANE. That cable may go out at any time. I might say also that there are a lot of repairs going on over the cable, which requires the cables ship to go out constantly. The cables ship hardly ever stays in its home port for any length of time, probably one, two, or three weeks, when something else occurs, and it has to go north again to make a repair.

Senator HITCHCOCK. How long does it take to do this work?

Colonel SEOANE. Sometimes it takes a good while.

Senator HITCHCOCK. No; I mean how long will it take to do this reconstruction?

Colonel SEOANE. This reconstruction will take the best part of a year. It will take practically six months to make the cable, and our cables ship would come here to the east coast to get it and take it back and lay it, which would take probably another four months; so that at the very best, whenever we start on this thing we still have to hope that that old cable will go on for another year.

Senator SPENCER. When you speak of the cable going out at any moment, what do you mean by its going out?

Colonel SEOANE. On account of abrasions and other things the electrical balance might become so destroyed that we could not pick up the point of fault anywhere, we should be unable to ascertain where any particular fault existed. There would be the cable and nobody would know what to do in the whole length. It would become dead.

Senator WADSWORTH. This cable is about 18 years old?

Colonel SEOANE. Yes.

Senator WADSWORTH. What is the average life of cable?

Colonel SEOANE. The average life of a rubber cable is—probably it has no average life, because all the experts were against the idea of putting down a rubber cable in the first place.

Senator WADSWORTH. Is this a rubber cable?

Colonel SEOANE. Yes; this is a rubber-covered cable, and we did not want to go abroad, particularly to England, where cable is made, to have this cable made for Alaska, and so we made it at home out of the materials we had. There is no gutta-percha cable made in this country and, therefore, it was an improvised cable. A gutta-percha cable has, however, an indefinite life, there being cables in many instances that have been in use 50 years.

MANUFACTURE OF GUTTA-PERCHA CABLE.

Senator HITCHCOCK. Where does gutta-percha come from?

Colonel SEOANE. Gutta-percha comes from Borneo and the surrounding islands.

Senator SPENCER. What kind of a cable do you plan to purchase?

Colonel SEOANE. General Squier will put down a cable which is being designed at present by the Western Electric Co. or the American Telegraph & Telephone Co., which will probably have four times the speed capacity of existing cables. It will be very much along the lines of the cable that was recently put down between Key West and Habana; in other words, it will be the very last word in cable progress.

I might say that in the last 50 years hardly any progress has been made in the cable art; it has stood still until the last two years, when, through systems of loading, to use an electrical expression, it is expected that the speed capacities of cable, and the message-carrying capacities can be toned up to three, four, or five times the rate at which they went over the old cables; so we will have a very fine cable—really, it will be the last word in cables.

Senator SPENCER. You mean a gutta-percha cable.

Colonel SEOANE. It will probably be a gutta-percha cable.

Senator SPENCER. Now, you said they are not made in this country.

Colonel SEOANE. They are not made in this country, but if this cable is laid it will be made by the Western Electric Co. or the American Telephone & Telegraph Co.; if they sublet any part of it to be built abroad it will be a matter to which the Secretary of War might not interpose any objection.

Senator SPENCER. So it will all have to be built abroad, particularly if there is any separating of a part of it; if we do not make it in this country there is only one place where it can be made.

Senator HITCHCOCK. But it is hoped to develop the making of it in this country.

Colonel SEOANE. The Bureau of Standards is carrying on considerable investigation toward the making of cable in this country through the process of devising a satisfactory substitute for gutta-percha. The various cable companies expect to be hooked up so as to make cable in this country; but, aside from all that, the art to-day is such—or, the truth is, there is no gutta-percha insulation being put on in this country.

A cable is divided into two or three parts—the core, which is the copper part, is immediately covered with gutta percha; but after that, however, comes various other coverings, and then various other coverings on that, so that the cable could be divided into several parts; there might be fractional parts—that is, the core, the copper work might be made up and be sent abroad to have this gutta percha insulation put on, and then be brought back to be completed, therefore, only a fractional part of the work might be done abroad.

Senator HITCHCOCK. Where is gutta percha cable made?

Colonel SEOANE. Gutta percha cable has always been controlled in Great Britain, although there is a factory in Italy and the Germans have always maintained a factory. France has tried it, but does not continue it, so to-day the truth is that gutta percha cable is made in Italy, Germany, and England. There are five factories in Great Britain, and only one in each of the other countries.

Senator WADSWORTH. Is there any other reason why it could not be made here, if our people have encouragement to make them feel they will get orders?

Colonel SEOANE. That is the only thing that is holding up the development of the art. We have never interested ourselves in trans-oceanic communications to a sufficient extent to go in and manufacture cables.

We take a great deal of credit for putting down the first cable across the Atlantic Ocean. Cyrus W. Field was really the promoter, the man who had the vision to see and to bring that cable into existence, but he had to go to London to get the capital; and the British Government subsidized the affair, and English engineers were used and British ships were used, so that in London they take credit for the first Atlantic cable, notwithstanding Cyrus W. Field, an American, was the man with the vision.

Senator WADSWORTH. And they have been the ones that have pushed it ever since.

Colonel SEOANE. They have been the one who have pushed it ever since; from that date on Great Britain has kept the cable business

right in her own hands, and nearly every project that has gone forth has been organized more or less with British capital; and the result is that to-day the cable factories in England are in such a condition that they can design a cable for you; they have their own cable ships, and they can lay the cable, too; they can build the cable and guarantee that in 30 days, or any other specified length of time which may be mentioned in the contract, it shall have a certain speed; while there is not a single factory in the United States that has a cable ship, and if you deal with them here you have got to take the cable at their factory door and lay it the best way you can.

METHOD OF LAYING CABLE.

The Signal Corps happens to be in excellent condition so far as laying cable is concerned; we have a fine cable ship, and we have a crew aboard it that has been there for 18 years—that is, in continuous existence—so we have as fine an ocean-going cable personnel as is to be found in the world to-day.

Senator WADSWORTH. What do you think about the possibilities for manufacturing cable in this country if there is any reasonable assurance that cables that we really need would be laid?

Colonel SEOANE. I think the cable interests as they exist in this country to-day would go ahead at once with deep-sea submarine cable if they had any assurance that there would be a continuing business, or that we would continue to interest ourselves with submarine cables.

Senator JONES. I have been assured that if our people are satisfied that another Pacific cable would be laid they would go to manufacturing submarine cable in this country.

Colonel SEOANE. They would. I might say we have cable factories in this country and they manufacture various kinds of cable, probably a dozen kinds of different cables that are used for communication purposes, but particularly telephonic.

Senator JONES. It is claimed, I think, that Great Britain largely monopolizes the gutta-percha, yet with gutta-percha produced in the Philippine Islands we ought to get some of it.

Colonel SEOANE. None of the cable used for telephone purposes, going under rivers, etc., has any gutta-percha in it, and this submarine cable has gutta-percha in it; it also takes specially designed machines to make it; therefore we never went in for that, because there never was any demand apparently for it, no effort to put down a trans-Pacific cable, or otherwise.

If the country interested itself in transoceanic communication problems our factories would be going on with it just like they have done with everything else. There is nothing very difficult about making submarine cable except getting the gutta-percha.

Senator HITCHCOCK. Gutta-percha takes the place of rubber?

Colonel SEOANE. That is all.

Senator HITCHCOCK. That is all it does?

Colonel SEOANE. That is all in the world it does. It hardens at once, as soon as it is put on, without vulcanizing. One can not use rubber without it being vulcanized, and while vulcanizing is only a heat process and you can vulcanize a small piece very satisfactorily,

when you have to vulcanize a piece of indefinite length, such as many miles, there are places in the length that become overvulcanized, or, in other words, burned or overcooked, and that is one of the things that make it go out.

Another difficulty within vulcanized rubber insulation is that in places it is under vulcanized and in those places it is soft and spongy.

Senator JONES. Colonel Seoane, I suppose you have described already what would happen if this Alaska cable were to go out.

Colonel SEOANE. I have.

Senator WADSWORTH. Are there any other questions you would like to ask Colonel Seoane, gentlemen?

Senator HITCHCOCK. Is gutta-percha any more expensive than it was before the war?

Colonel SEOANE. I thought I could recall the figures before the war. At the present time its price is 11 shillings a pound and has been approximately that same price for some time. Rubber and all other commodities coming from the Dutch East Indies and the Malays, Singapore, and that section generally had such a collapse in the price market that I feel safe in saying that gutta-percha is about down to pre-war prices.

Senator WADSWORTH. They use a great deal of it for golf balls?

Colonel SEOANE. Yes; but that is an inferior variety. I might say also in connection with gutta-percha that the Bureau of Standards is carrying on investigations to see whether balata, which is a certain type of rubber grown on the American Continent, in Venezuela particularly, would not make a suitable compounding ingredient to mix with gutta-percha.

Balata is a variety of rubber used commercially a great deal for belting, but it has certain qualities which makes it not so desirable as good plantation or para rubber. Nevertheless, it appears to have qualities which would make it a very desirable compounding ingredient to mix with gutta-percha. I think, gentlemen, that this undertaking could be carried out now at about as reasonable a price as we can hope to get and that we would not be losing any money whatever.

Senator WADSWORTH. Thank you very much, Colonel.

Major BROWNE. Colonel Richardson is here in connection with construction and maintenance of roads in Alaska, which item appears at page 113 of the bill.

STATEMENT OF COL. WILDS P. RICHARDSON.

CONSTRUCTION AND MAINTENANCE OF MILITARY AND POST ROADS, BRIDGES, AND TRAILS IN ALASKA.

Colonel RICHARDSON. Mr. Chairman, I think I should make a preliminary statement as to why I appear in this connection; I was in charge of the road work in Alaska, as you gentlemen know, for a number of years previous to the war; and, on leaving Alaska in 1917 to go to the war, I asked to have the work transferred to the Chief of Engineers and it was so transferred during 1917. The work was reorganized, and now Maj. James G. Steese, Corps of Engineers, retired, is president of the board and is in charge of the work. He has two assistants—the three comprise the board.

Major Steese was here for some weeks this winter and appeared before the House committee. You will find his testimony given in full in the house hearings. He found it necessary to return to Alaska in the interests of the work, and he left a few days ago not knowing when he might be called before the Senate committee. Before going he asked me if I would not appear in his stead, leaving with me a written statement for submission to the committee; so, I appear for him and for the commission on that account; and, I might add further, as a chairman of a subcommittee on transportation, which is part of the interdepartmental committee on Alaskan affairs, having as its object the coordination, as far as possible—or aiding by its recommendations the coordination—of the various department activities in Alaska. This request came to me rather suddenly at a time when I am not quite as familiar with the work as I was five years ago; but I have kept a general track of it. I presume you gentlemen do not care to have me take the time now to read Colonel Steese's statement, but I will call attention to it and leave it with you.

Senator SPENCER. Colonel, have you read the House hearings?

Colonel RICHARDSON. Yes, sir.

Senator SPENCER. Is the statement printed in the House hearings?

Colonel RICHARDSON. Not this statement, but the House hearings are very complete and I might say that the appeal, if I may put it that way, of Colonel Steese, to which I am giving all the support I can, is to have the amount carried in the House bill increased from its present sum of \$425,000.

Senator WADSWORTH. To what?

Senator SPENCER. To what amount?

Senator WADSWORTH. To how much?

Colonel RICHARDSON. To \$1,061,500. I will go into that in a few minutes a little more in detail.

I want to explain as far as I understand the situation how that amount happens to be in the bill. The amount appropriated last year was \$425,000, although the amount asked for was over \$900,000.

Senator WADSWORTH. In this bill it is only \$425,000, as it was sent from the Budget office.

Colonel RICHARDSON. I am trying to get to that as quickly as possible. Colonel Steese explained to me, although I do not fully understand all the details of how the estimate had been arrived at at the time the Budget was made up and why the amount which was appropriated last year, \$425,000, was named in the Budget estimate; and afterwards he was unable to get it changed or increased because it had already been submitted.

Senator SPENCER. But there is no Budget estimate for any larger amount than \$425,000?

Colonel RICHARDSON. No, sir.

Senator WADSWORTH. Have they asked for a supplemental estimate? They frequently send down supplemental estimates from the Budget Bureau.

Colonel RICHARDSON. I do not think there was one submitted.

Senator JONES. The amount Colonel Steese asked for was \$1,200,000.

Colonel RICHARDSON. But upon advice and instruction, when hearings were had before the subcommittee of the House, that was reduced to \$1,061,000.

Senator JONES. Let me suggest, Colonel Richardson, that whoever has charge of this matter submit a request to the Budget Bureau for a supplemental estimate if you deem it imperative that this amount should be increased.

Colonel RICHARDSON. I will be very glad to do it, Senator, if I find I am authorized to, or that I am in a position to, if the Secretary of War will approve it.

Senator WADSWORTH. I suppose it will have to come through the Secretary of War; but we are having supplemental estimates coming down here every little while, but neither the Senate nor the House likes to exceed the Budget estimate unless there is something imperative requiring it.

Colonel RICHARDSON. I have not had time to be fully informed on all phases of this question; and I understood Colonel Steese had presented a supplemental estimate and asked that it be forwarded by the Budget Office; but for reasons that I am not able to explain the Budget Office did not submit a supplemental estimate.

Senator JONES. I suggest that you take the matter up with the Secretary of War and, if he deems it advisable, to request the Budget Office to submit supplemental estimates, then that be done.

Senator WADSWORTH. What is the situation, Colonel, with respect to these roads?

Colonel RICHARDSON. The estimate of \$1,061,000 calls for \$501,500 for maintenance alone of the existing road system; it calls for \$385,000 for improvement of the existing roads to meet the increasing demands and tonnage.

Senator JONES. Three hundred and what?

Colonel RICHARDSON. \$385,000; and \$175,000 for new construction. A great deal of this, I may say, particularly in the items for improvement and new construction, is in connection with the railroad now practically completed and to open that field, and to produce tonnage for that road.

If the committee cares to, I would like them to glance over this map which I have brought down here, which gives you very briefly a good idea of the wide extent of the road work which has been carried on.

Senator HITCHCOCK. What was the amount expended on these roads, Colonel Richardson?

Colonel RICHARDSON. There has been a total of \$6,541,469, of which approximately one-half has been appropriated by Congress and the remainder from various Territorial sources.

Senator HITCHCOCK. This item is for maintenance, \$521,000.

Senator WADSWORTH. \$501,000.

Colonel RICHARDSON. \$501,500; yes.

Senator HITCHCOCK. Should it cost \$500,000 a year to maintain these roads?

Colonel RICHARDSON. Colonel Steese's estimate, which includes repair and maintenance necessary to hold existing systems and to prevent further deterioration, is for \$501,500.

Senator HITCHCOCK. Is that to be a continuing appropriation?

AVERAGE COST OF MAINTENANCE PER MILE.

Colonel RICHARDSON. That is an average per mile of \$97.17, there being a total mileage of 5,160 over all roads. That estimate of \$97.17 per mile is all roads, including winter sled roads and trails.

Senator HITCHCOCK. How much?

Colonel RICHARDSON. \$97.17 average, divided into several classes of construction. There is an average of about \$250 per mile of road on what is called wagon road; something like \$25—these are general figures—\$25 per mile for what is known as winter sled roads, roads that run through areas and sections of the country not passable in summer; but these roads make very good winter roads after the ground is frozen and the snow comes. The average is something like \$10 per mile for the maintenance of what are known as trails; and something like \$3 per mile for staking trails through the treeless and wind-swept areas of Alaska to guide travelers and furnish protection to the people.

NUMBER OF MILES OF ROADS. ETC.

Senator HITCHCOCK. How many miles did you say there were?

Colonel RICHARDSON. There is a total of 5,100 miles.

Senator WADSWORTH. How much—

Colonel RICHARDSON. Beg pardon?

Senator HITCHCOCK. How many miles of road are there all together?

Colonel RICHARDSON. The total mileage given here, for which the estimate for repair and maintenance is given, is 5,160 miles; and I find here—road commission report—that altogether about 1,100 miles of wagon road has been constructed, 756 miles of what are known as winter sled roads, 3,721 miles of inexpensive trails, and 712 miles of flagged trails, a total system of more than 6,000 miles.

The road work in Alaska has been carried on under a great many difficulties in the past, during the time I was in charge of it, with very meager appropriations and widely scattered communities, and uncertainty of permanence, just mining camps; and it was never advisable, in my opinion, to appropriate very large sums for road work in the beginning; but it was important, and is now, that a definite policy be adopted and a fixed amount, possibly within certain limits, should be appropriated from year to year in order that the board may make its plans and provided its machinery and materials and carry forward a system of construction toward a definite result. To that end the board has prepared a program involving a proposed expenditure of about \$10,000,000 running through a period of 10 years, and in pursuance of that plan submitted last year an estimate, as I say, of \$950,000 or \$960,000, of which \$425,000 was appropriated, and that was made the basis of the estimate carried this year by the Budget office which was submitted, as Colonel Steese informed me, before his detailed statement had arrived and before he could present the data necessary to form a different estimate.

Senator JONES. Did you say who constitutes the board?

Colonel RICHARDSON. The personnel of the board?

Senator JONES. Yes.

Colonel RICHARDSON. There are three officers from the Engineer Corps, Major Steese—he was a colonel during the war. Captain Gottwals, and Captain Ward.

Senator JONES. They constitute the board?

Colonel RICHARDSON. Yes; and they are all from the Corps of Engineers.

Senator JONES. Has this money been expended under this board?

Senator WADSWORTH. I think there are some other members on the board, are there not?

Colonel RICHARDSON. Only three members constitute this board, or road commission, for Alaska.

Senator WADSWORTH. Only three?

Colonel RICHARDSON. Three officers.

Senator JONES. Has this money been expended under this board heretofore?

Colonel RICHARDSON. Yes, sir; this is a different personnel from what it was up to the outbreak of the war.

Senator JONES. Has the board charge of the expenditure of this money on roads in Alaska, or is it not under the charge of the Secretary of War?

Colonel RICHARDSON. Well, it is under the rules and regulations prescribed by the Secretary of War.

Senator JONES. It has not been given to the board, though, has it?

Colonel RICHARDSON. Well, the law is very broad.

Senator WADSWORTH. This language is new language.

Senator JONES. This is new language in this bill here; that is the reason I asked that question.

Colonel RICHARDSON. I do not think so. By the way, I would like to say that those words "military and post" should be eliminated because this board has charge of all the roads and trails now in Alaska.

In 1918 Congress provided, and authorized the Secretary of War to submit such items as he deemed proper, for the carrying on of the work. Prior to that it had been for "military and post roads" and was really begun as an emergency proposition, and was never authorized by a specific act of Congress until this amendment of 1918. I speak of this from a knowledge gained from 13 years' connection with the carrying on of the work—since 1905.

Senator HITCHCOCK. Has this board jurisdiction over railroads?

Colonel RICHARDSON. No, sir.

Senator HITCHCOCK. How many miles of railroad have been built?

Colonel RICHARDSON. Including the mileage that has been taken over from the Alaskan Northern Railroad, and rehabilitated, and the railroad from Fairbanks, the narrow gauge, about 555 miles of railroad.

Senator HITCHCOCK. Substantially completed?

Colonel RICHARDSON. Substantially completed with the exception, principally, of a bridge across the Nenana River.

Senator JONES. I want to have this clear: This money for roads and trails in Alaska has not been spent heretofore under the direction of this board, has it?

Colonel RICHARDSON. Yes, sir.

Senator JONES. In the last act it read this way:

For the construction, repair, and maintenance of military and post roads, bridges, and trails, Territory of Alaska, to be immediately available, \$425,000, provided that the Secretary of War is hereby authorized to receive from the Territory of Alaska, or other source such funds as may be contributed by them to be expended in connection with funds appropriated by the United

States for any authorized work of construction, repair, and maintenance of roads, bridges, forests, trails, and related works in the territory of Alaska, and to cause such funds to be deposited to the credit to the Treasurer of the United States and to expend the same in accordance with the purpose for which they are contributed.

While we have a general legislation providing for this board in Alaska we never gave them any money, but we have appropriated the money for the Secretary of War.

Colonel RICHARDSON. Senator—

Senator JONES. This is new language in here.

Colonel RICHARDSON. This is, but the old language was carried as here in this bill until two or three years ago and I do not know how it was changed because I am not now familiar with it; but this is the old language of the appropriation, Senator, right here.

Senator JONES. It may have been a couple of years ago, but for the last year, anyhow, it was not; and my recollection is that for a year or two before that it was carried in the same language we have in this bill.

Colonel RICHARDSON. That language was certainly in the bill, Senator, for 12 or 14 years, just as it is here described. (Of course, the words "to be immediately available" is something interpolated. There were some changes but the original language—

Senator JONES.*I am not questioning that, but that original law has not been referred to in the last appropriation bill; and money has not been appropriated for that board, but has been appropriated for the Secretary of War.

Colonel RICHARDSON. I remember when it went out, Senator.

Senator JONES. When did it go out?

Colonel RICHARDSON. It was about four years ago, probably the year before the war.

Senator JONES. Yes.

Colonel RICHARDSON. And I entered a mild protest and the chairman of the committee said that it could not be expended except by the board of road commissioners anyhow; and while I rather insisted on the old form and the phraseology of previous years, because the law contemplated it, he said it could not be spent except through the board.

Senator JONES. For the last four or five years has the money actually been expended under the direction of the board?

Colonel RICHARDSON. Absolutely.

Senator WADSWORTH. I have no doubt of that, under the act of January 27, 1905, amended May 4, 1906, creating the board; and in the appropriation bill of last year, and the year before no mention of the expenditure of money by the board was made; probably the Secretary changed it.

Colonel RICHARDSON. I could not understand it at the time. It was apparently omitted through an oversight. I think it was Senator Chamberlain who told me that he thought he better not change it back because it might raise a question. The amount provided in that appropriation was \$500,000; and he said that we had better let it go as it was; and it would continue as a matter of precedent and that we had better not put it in and not change it again. That is the way it became changed, and, so far as I understood at the time it was an accident that that original phraseology was left out. That phraseology, I may say, was prepared by The Adjutant General's office in

the first estimate and was approved by the Secretary of War when first presented before the committee, and the board was first organized.

GENERAL CONDITION OF ROADS.

Senator WADSWORTH. Colonel, what do you know about the condition of these roads up there and the actual necessities for more than \$425,000 being appropriated?

Colonel RICHARDSON. Well, Mr. Chairman, I can say that Colonel Steese has explained his views in this statement of his which I will submit, but will not read.

I would call attention to the fact that more than the amount now in the estimate is necessary for the proper repair and maintenance of the roads that exist. Roads in a new country of that character deteriorate very rapidly, of course, and have a high cost of maintenance before they become stabilized and settled. They are greatly affected by the continual changing of the traffic, especially the introduction of automobiles and trucks. That has been very hard on the roads, making the cost of repairs excessive.

Speaking, now, of repair only; if we are going forward in the work of opening up Alaska and developing it, it is necessary to improve and extend many of these roads, and it is necessary to take up new projects if we are going to support the railroad construction. I have emphasized many times before the committee, that the paramount need in my judgment has been the construction of wagon roads and trails in advance of the construction of railroads. We should first determine the localities where tonnage can be developed, where strikes of gold have been made, or where prospects are promising, leading to them first by inexpensive trails increased into country roads, and then, when conditions justify it, improve the road so that it will withstand heavy traffic; but first we should determine where the tonnage is going to be before a railroad is constructed. As a matter of fact, the railroad has been constructed without determining those areas of tonnage, and building of the necessary roads to aid the people in prospecting and getting through the country; and now it becomes paramount and an imperative obligation, I should say, on the Government, to support that investment in the railroad by the building of spurs of railroad, and the building of wagon roads and trails to develop all the tonnage that can be brought to the railroad; and a large part of this estimate, both for the improvement of existing roads, many of which have been built, some before the railroad started and some since the railroad started—for several new projects are in support of that railroad.

I think the strongest argument that I could offer for this increased estimate, and also the one that I mentioned a few minutes ago, is that of having some definite plan outlined so that the board may know what they may expect and what to do. There are other areas of Alaska different from that traversed by the railroad, of course, where people are carrying on industries, trying to develop the country, which have small roads, incomplete systems, and those should be maintained and extended where valuable, as well as the work along the railroad. All of this work, in whatever part of Alaska it is carried on, aids in the development of the Territory and thus aids indirectly in the support and protection of the railroad itself; although it may be far removed, it gets people in Alaska and encourages people to make effort to develop something and to make their homes there.

Alaska has been a wilderness country all this period that we have owned it largely because of the difficulty of access and of travel through the country. Our people in the United States, of course, in a large measure forget the value of wagon roads during the period of railroad building, and expect that Alaska should develop just as the great Middle West did by spanning it with a few lines of rails, but there it is entirely different. Except in a few places, a man can hardly go anywhere without some sort of prepared road or trail, and frequently it is difficult and even dangerous for people to go on foot, on account of the swift glacier streams and bogs and other conditions that interfere with travel.

Senator Jones is very familiar with that country and knows what conditions are in western Washington—that you can not get through a country with such undergrowth—of course, it is a very different country from Alaska in that it is covered with much finer and heavier timber, but the same kind of need exists for roads in Alaska as is found in western Washington and in all that wooded country running north from there.

Senator JONES. We could not expect Alaska to be developed to any great extent until means of communication are made available.

Colonel RICHARDSON. No, sir; you can not.

Senator JONES. However rude they may be.

Colonel RICHARDSON. The country at large can not be developed, and to make an inviting place for people to go and live and build homes there must be means of communication. The Territory is not able to do that work now; its resources have not been sufficiently opened up. I might add, which is very important in this connection, that last year the amount received from the Alaskan fund and from Territorial allotments was something like \$300,000; this year Colonel Steese advised that he did not expect more than about \$115,000 from these sources; and whatever amount we finally get through this bill, the total amount would be reduced in reality to that further extent.

Senator WADSWORTH. Do you know the cause of that reduction?

Colonel RICHARDSON. The local conditions of business in Alaska. Business has fallen off considerably, you know, Senator, in the last few years, and this Alaskan fund is derived from a Federal tax upon various kinds of business, such, for instance, as the salmon industry, which is the biggest business in Alaska and the principal business of the Territory. But the business of the country has gone down to such an extent that returns from this tax will be very much diminished.

Senator JONES. What do they estimate the white population of this country to be now?

Colonel RICHARDSON. I think it is about 26,000 at the present time.

According to some figures which Colonel Steese compiled and which are referred to in a bureau statement, Alaska has a business, import and export, that totaled at its highest point about \$100,000,000. I do not suppose it will be one-half of that this year, or at least much reduced. We have not got the figures yet, but it will certainly be very much less. Of course, that is a discouraging state of affairs—to have this expensive railroad built through the country to tidewater and no tonnage for it; at least, no great tonnage.

Senator JONES. Just describe the conditions along that railroad with reference to development and needs in order to make a development.

Colonel RICHARDSON. I do not know that I could tell you much about the present conditions there, as I have not been on the scene myself for some length of time.

Senator WADSWORTH. You have not?

Colonel RICHARDSON. No, sir; but it leaves tidewater at Seward.

Senator WADSWORTH. Of course, if you have not been over it you can not be expected to know about it. We have the House hearings, however.

Colonel RICHARDSON. I think you have better information on record that I could give you, because I have not personally been over the road. It was only finished this year and had progressed only a short distance from each end when I left during the war.

Senator JONES. Have you ever been over the country through which the railroad crosses?

Colonel RICHARDSON. No, sir; not entirely; never across Broad Pass. I have been on the Nenana River and in the Susitna country, but I never crossed the Broad Pass.

Senator JONES. Now, as I figure, if we do not allow more than the \$450,000 that will not be enough to maintain the roads and trails we now have?

Colonel RICHARDSON. No, sir; it will not.

Senator JONES. Not even to maintain them in their present condition?

Colonel RICHARDSON. It will not.

Senator JONES. Much less provide for any new construction?

Colonel RICHARDSON. It will not provide for any improvement or new construction.

Senator JONES. Has the board—I believe you stated it has—has the board laid out a general plan of road development in Alaska?

Colonel RICHARDSON. Yes, sir; I think it is quite complete, Senator Jones.

Senator JONES. That is described in the House hearings, is it not?

Colonel RICHARDSON. Yes, sir; it is in the House hearings.

Senator JONES. Then you need not relate it.

Colonel RICHARDSON. I can call attention to some figures here, just the amounts?

Senator JONES. Yes.

Colonel RICHARDSON. There is provided in the program for the fiscal year of 1923 an appropriation of \$1,200,000; for the fiscal year 1924, \$1,500,000; for the fiscal year 1925, \$1,600,000; for the fiscal year 1926, \$1,400,000; for the fiscal year 1927, \$1,000,000; and then for the fiscal year 1928 there is provided \$900,000; for the fiscal year 1929, \$750,000; for the fiscal year 1930, \$600,000; for the fiscal year 1931, \$500,000; and then for 1932 there is provided \$450,000; making a total of \$10,000,000, giving the increased amount necessary to expend in early construction, and the diminishing amounts for maintenance and repair as the system becomes settled and stable.

Senator JONES. Now, do you know whether or not this road plan is largely in connection with the railroad?

Colonel RICHARDSON. More than 50 per cent of it is, I am sure. I have that general statement from Colonel Steese. I think I should

say probably 60 or 70 per cent of it would be directly or indirectly contributory to and in support of the railroad, by which the country would be developed. We are only leaving the remaining districts of southeastern Alaska and the lower Yukon and the Nome district. All the rest of the interior work will contribute to the support and development of the railroad.

Senator JONES. Are there any other suggestions that you think it would be well for the committee to have?

Colonel RICHARDSON. Beg pardon, sir?

Senator JONES. Do you think of any other suggestions which you think it will be well for the committee to have in determining what should be done?

Colonel RICHARDSON. No, sir; I do not think I do, Senator.

There is a great deal of data in this statement which I could read, but I think the committee would rather have that printed and read it then than have me read it. The data gives figures of the total expenditures on the roads, up to date, at \$6,510,757, and a total mileage for the entire system, including sled roads and trails.

Senator JONES. That, I take it, is all covered in the House hearings?

Colonel RICHARDSON. I do not know whether they are or not.

Senator WADSWORTH. That is rather historical.

Colonel RICHARDSON. I am submitting this statement at the request of Colonel Steese, and I think perhaps it should go in the hearings.

Senator WADSWORTH. Pass it over to the stenographer.

Colonel RICHARDSON. Colonel Steese asked me to submit it and then to answer any questions the committee saw fit to ask me.

I think, Senator Wadsworth, that it would be well to have this language of the original act restored as it is in this bill here before us.

CHANGES IN WORDING OF PARAGRAPH.

Senator WADSWORTH. That is, you do not ask for any changes of the language of this bill?

Colonel RICHARDSON. No, sir; except leave out "military and post"; I see no reason why it should be carried that way any longer.

Senator WADSWORTH. You think that the words "military and post" should be stricken out so that it will read "for the construction, repair, and maintenance of roads"?

Colonel RICHARDSON. Roads, trails, tramways, ferries, and bridges. I do not know that the tramways and ferries are necessary; we have been building and maintaining them just the same. But when this first estimate was put in Senator Warren was then chairman of the Military Affairs Committee, and it was his own language. He said "military and post" gives better support to the estimate because it is in the nature of postal facilities and in support of the telegraph line, too; that is how the military and post feature came to be inserted.

Senator WADSWORTH. You have no objection to that being left in, have you?

Colonel RICHARDSON. No, sir; I have not, although it restricts it a little bit and might raise a question sometime. But there is not a road that is constructed by the board in Alaska that does not afford some postal facility.

Senator WADSWORTH. Is there anything else, Colonel Richardson?

Colonel RICHARDSON. I do not think of anything else to offer, Senator. As I said, I must offer an apology for not coming more fully prepared.

STATEMENT SUBMITTED BY COL. JAMES G. STEESE, PRESIDENT ALASKA ROAD COMMISSION.

The Alaska Road Commission was organized and began operations upon a "military and post" system of roads and trails in 1905. Prior to its organization there were, in the whole of the Territory, less than a dozen miles of what might be called wagon road, with a few hundred miles of pioneer trail, mostly constructed by expeditions under the War Department.

Up to December 31, 1921, the commission had expended a total of \$6,510,757.61 upon a system of 6,290 miles. These funds consisted of direct congressional appropriations amounting to \$3,830,000, of \$2,420,086.57 allotted from the Alaska tax fund, and of \$260,671.04 contributed by the Territory. The above funds were all disbursed through the Treasury of the United States. In addition, the commission has supervised the expenditure of about \$250,000 of Department of Agriculture funds available within or adjacent to the national forests, and about \$200,000 from various local sources. The system consists of 1,101 miles of wagon road, 756 miles of sled road, 3,721 miles of permanent trail, and 712 miles of temporary flagged trail.

During the last fiscal year \$666,789.08 were spent upon 5,020 miles of the system. The completion of the project within the next 10 years, including maintenance and repair of the completed sections during the same period, is estimated to cost \$10,000,000. The estimate for the next fiscal year (1923) is \$1,200,000, divided as follows: Item I, Repair and maintenance, \$501,500; Item II, Improvement, \$385,000; and Item III, New construction, \$313,500.

The first comprehensive 10-year project was submitted in 1913, and was for an average appropriation of \$725,000 per year. Work upon this project was seriously begun in 1916 with an initial appropriation of \$500,000. The same amount was appropriated in 1917. Then the war caused appropriations to be reduced to only \$100,000 per year for the next two years, and it was impossible to keep up ordinary maintenance.

With the commercial development of the Territory, the roads originally constructed chiefly for military purposes became more and more important for commercial purposes, particularly as they, themselves, have made possible the development of commercial activities and industrial enterprises in the regions they traverse. As a result of the studies made in 1913, it was found that the roads and trails then constructed were saving the inhabitants over \$2,000,000 annually in reduced transportation charges. It is doubtful, however, if anything like that amount of freight would have been transported without the roads, and the direct loss which would have been occasioned by the restriction on output and development if the roads did not exist can not be estimated.

Meanwhile, in 1918, the Secretary of War was definitely charged by Congress with responsibility for the construction and maintenance, not only of "military and post" roads in Alaska, but of "other roads, bridges, and trails" as well.

The present commission took charge in 1920 with an initial appropriation of \$350,000, followed in 1921 by an appropriation of 425,000. With these meager amounts we were expected to continue the new construction begun in 1916 upon a \$500,000 per year basis, to repair the damage due to the neglect of the lean war years, to keep the existing system in repair, to build a more substantial type of road to withstand motor traffic, and to embark upon a \$3,000,000 project to provide feeder highways to the newly constructed Government railroad; and all this in spite of the increased cost of labor, materials, and supplies. The job is, of course, impossible upon any such basis.

In its first report the new commission submitted a 10-year program, involving an annual appropriation of about \$1,000,000 for 10 years, by which time it is hoped that the Treasury will have developed to such an extent as to take over the major portion of this burden as a part of its own internal public works. Our first estimate was for \$995,000, of which \$425,000 was appropriated for the current fiscal year.

This 10-year program was prepared by the Alaska Road Commission in cooperation with the Governor of Alaska, the Territorial Road Commission, and other Federal and Territorial officials interested. That this program is sound

is evidenced by the fact that the Alaska advisory committee, consisting of representatives of the Department of the Interior, the Department of Agriculture, the Post Office Department, and the United States Shipping Board, reported in 1920 that "the construction of wagon roads and trails is one of the most important and urgent needs of Alaska," and recommended "an appropriation of at least \$1,000,000 annually until the completion of an adequate system of roads in Alaska."

In May, 1921, the interdepartmental Alaska Board, consisting of representatives of each of the Federal executive departments, recommended "that approval be given the general program of road construction submitted by the Alaska Road Commission in its annual report for 1920, and that definite adoption of the proposed program be urged before Congress, with a view of providing feeders to the Government railway as well as for the general development of the Territory."

The estimate submitted for 1923 is a part of the program referred to in the quotation above. The estimate of \$1,200,000 represents the cost of the portion of the work urgently needed that can be economically executed and should be undertaken with Federal funds during the fiscal year ending June 30, 1923.

House joint memorial No. 14, approved April 14, 1921, and quoted below, shows that the Territorial legislature is in thorough accord with the program submitted:

To the honorable the President, the Senate, the House of Representatives, the Secretary of War, and the Chief of Engineers of the United States:

Your memorialists, the Senate and House of Representatives of the Territory of Alaska, do respectfully submit the following for your consideration:

That the Alaska Road Commission, since its creation under the act of Congress approved January 27, 1905, has constructed approximately 5,000 miles of military and post trails and roads in all sections of the Territory of Alaska;

That such construction has resulted in great benefit to the country and has aided greatly in developing the various sections of our Territory;

That these roads and trails are not merely of local importance; but they form a well-balanced system of communication, planned to serve the entire Territory;

That the expenses incurred in such road and trail building are defrayed by an annual appropriation made by the honorable the Congress of the United States, and by a portion of what is known as the Alaska fund, and other moneys contributed from various sources;

That due to the curtailed appropriations during the war period sufficient funds were not available for ordinary maintenance, as a result of which considerable deterioration has resulted. Furthermore, the system, as a whole, has not been completed, so that many routes can not be utilized throughout without breaking loads due to the uncompleted intermediate sections;

That the newly organized Alaska Road Commission has now completed an investigation of the entire system; and, as a result, submitted estimates for \$955,000 for the next fiscal years for the rehabilitation, repair, and improvement of the system;

That the Government railroad, now nearing completion, will need a system of feeder roads and trails in order to provide traffic. The Alaska Road Commission contemplates the completion of a system of such feeders, and one-half of the amount asked for will be expended on roads and trails directly tributary to the Government railroad;

That the restoration and construction of roads planned by the Alaska Road Commission will greatly aid in relieving the hardships created by the rise in prices and the consequent cessation of gold mining;

That we indorse and approve the program of the Alaska Road Commission and consider it one of the most important steps projected for the development of Alaska.

In view of these facts, we respectfully request that the Congress, in its consideration of the annual appropriation for the support of the Army, 1922, include at least the full amount of \$955,000 in its item for the "construction, repair, and maintenance of military and post roads, bridges, and trails, Alaska," and, if possible, to increase the same in order that substantial results may be obtained without disastrous delay.

And your memorialists will ever pray.

The close cooperation between the Federal and Territorial authorities which has existed ever since the passage of the Territorial cooperative road law, approved April 21, 1919, culminated on November 18, 1921, when the Governor of

Alaska, under the authority of the Territorial board of which he is chairman, placed the president of the Alaska Road Commission in general charge of all public works supported by appropriations of the Territorial legislature. The Territory thereby secures the use of the extensive organization and equipment of the Alaska Road Commission without any charge for supervision or other overhead. By adding the Territorial funds to its own resources, the Alaska Road Commission is enabled to increase the flexibility of its organization, to distribute its work and plant more effectively, and to consolidate purchases and supplies. An organization is being built up which can eventually take over all of this work as a part of the interior development of the Territory under its own control whenever its resources become adequate for its support. Letter of appointment is quoted below:

TERRITORY OF ALASKA,
OFFICE OF THE GOVERNOR,
Juneau, November 18, 1921.

Col. JAMES G. STEESE,
President Alaska Road Commission, Juneau, Alaska.

SIR: Confirming conference of a few days ago at which you consented to perform additional duties for the Territory of Alaska in order to more effectively carry out the provisions of the Territorial act of April 21, 1919 (chapter 11), I now have the honor to appoint you consulting engineer for the performance of such duties as may be especially assigned to you. You will serve as such without pay or other emoluments.

In addition to your supervision of road and trail work performed under co-operative agreements authorized by the Territorial act of April 21, 1919, and the act of Congress approved June 30, 1921, it is requested that you also assume the following duties:

(a) Supervise the activities of the chairmen of the Territorial road commissions for the third and fourth divisions.

(b) Check their vouchers and accounts and certify the same to the secretary of the Territorial board of road commissioners for the approval of the Territorial board, using the same general procedure and standards as required for your own accounts with the United States Treasury.

(c) Supervise in a similar manner the expenditure of the following funds appropriated by the Territorial legislature, as released from time to time by the Territorial board, as well as other funds that may become available for public works in the Territory:

Act of May 5, 1921, Nizina River Bridge.....	\$25,000
Act of May 5, 1921, Seward Peninsular Ry.....	30,000
Act of May 7, 1921, Shelter cabins.....	10,000

(d) Submit recommendations from time to time as to the allotment of additional funds that may become available.

(e) So soon as your other duties may permit, submit a five-year program of cooperative work, with the idea in mind of having the Territory assume responsibility for maintenance of feeder lines as rapidly as its resources will permit, the Alaska Road Commission to assume responsibility for trunk lines and new work.

Very truly yours,

SCOTT C. BONE, *Governor.*

Upon the direction of the House subcommittee, I submitted supplemental estimates in which I eliminated all "new construction" except the three most important feeder lines to the Government railway to give highway access to the railway from important actual producing districts. In no other practicable way can the operating deficit of the railway be economically cut down than by the provision of highway feeder lines. These supplemental estimates amount to \$1,061,500, and will be found printed in the House hearings.

My original estimate of \$1,200,000 will be found in detail in my printed report for the fiscal year 1921 (p. 48, Annual Report of the Chief of Engineers, 1921). These estimates have been concurred in by the chairman of the Alaskan Engineering Commission, who is charged with the construction and operation of the United States Government Railway in Alaska. The following letter, recently received from him, explains the urgent need of these highway feeders. Detailed information concerning the specific subprojects recommended is also given.

DEPARTMENT OF THE INTERIOR,
ALASKAN ENGINEERING COMMISSION,
Anchorage, Alaska, December 15, 1921.

Col. JAMES G. STEESE.

*President Alaska Road Commission,
Juneau, Alaska.*

MY DEAR COLONEL STEESE: In view of your proposed early departure for Washington to appear before the Appropriation Committees of Congress in Connection with the estimates of funds that will be required for road work in Alaska during the next fiscal year, it was thought to be an opportune time to call your attention to the desirability of impressing upon the War Department and the congressional committees the urgency, if not the necessity, of approving your road-building program for Alaska, as a means of furnishing essential feeders to the Government railroad.

As you have doubtless noted in the daily papers, the new Government railroad, running from Seward to Fairbanks, is now practically completed, with the exception of two gaps at river crossings (one of which will be closed next month), making it possible to deliver or receive passengers and freight anywhere along the line.

The Government railroad traverses the heart of Alaska, connecting an open-all-the-year port with the navigable waters of Interior Alaska, in compliance with the terms of the original act. As the railroad is now ready for business throughout its length, it is to be hoped that the Alaska Road Commission can assist this project by constructing the necessary wagon roads as feeders to the railroad trunk line, some of which in later years may well be made over into narrow gauge or standard gauge connecting lines.

I have studied the tentative schedule of allotments of funds for road building which you propose to make in the railroad area, out of the 1922 appropriation, and, in general, believe the apportionment of these funds has been wisely made, and will take this occasion to refer to some of these projects, noting particularly their usefulness to the Government railroad, as follows:

Palmer-Mile 26½.—This road is in the heart of the Matanuska agricultural district and serves an extensive area in the farming community. With extensions and branches, which the farmers themselves, perhaps, in cooperation with your commission, will eventually make, this road will be a very valuable addition to your system that will bring traffic to the railroad. There is no doubt but that several short stretches of road in the agricultural districts, such as this, even though of a mile or less in length, will stimulate traffic and warrant all expenditures made on them.

Wasilla-Willow Creek-Archangel.—This road in the mining district of Willow Creek, with its extensions to other fields, has opened up and permitted the development of a considerable industry. Before the railroad was started Willow Creek had established itself in no uncertain way as a permanent mining camp, and the progress of the past few years has demonstrated that much is to be expected of it. The \$20,000 allotment for 1922 may answer all purposes, but there is no doubt that from time to time as this district develops further expenditures involving new road construction will be warranted. It is to be noted that this district has already furnished a very gratifying tonnage to the railroad, and there is every expectation that it will be increased for a term of years to come.

Wasilla-Knik.—This road, which is in reality a portion of the original road from Knik to Willow Creek, passes through a more or less settled agricultural district to the old port at the head of Knik Arm of Cook Inlet. It is not likely that much seaborne freight will be hauled over this road, but rather that the entire traffic will be handled through the railroad station at Wasilla, perhaps back to salt water. The 1922 allotment, together with the estimate for 1923, which covers the entire district from Knik to Willow Creek, seems warranted in view of the agricultural and mining possibilities that lie within easy reach of this route.

Nancy-Rainy Pass.—This route at present serves the country adjacent to the headwaters of the Kuskokwim and Iditarod Rivers, more particularly the town of McGrath and Iditarod mining district. For a long time to come this will be considered more of a winter road than one to be made available for the entire season, although the possibilities of future development through this entire district are very gratifying. There is much snow to contend with in the average winter, and it is complained that travel is more or less precarious

owing to snowslides and other natural obstacles. It might be that the extension of the Kantishna road, by way of Lake Minchumina and Ophir, would make a more acceptable route, even though considerably longer; but there is no question but that a very large territory is served adjacent to the Nancy-Rainy Pass project which will call for other expenditures at no very distant date.

Talkeetna-Cache Creek.—Of the many proposed roads south of the Alaskan Range, this would seem to call for the greatest expenditure and attention, because of the vast mineral territory that lies adjacent to it. Several companies have established themselves along this proposed main highway, and are actively prosecuting mining development, while a number of embryo companies are maturing very early and effective operations. A number of dredging companies would, no doubt, take advantage of this means of transportation to work the gravels of the Cache Creek district, were the roads in shape for transporting their machinery and equipment. If the word of those who have prospected with drills and otherwise is to be relied upon, this will undoubtedly develop into an important feeder for the Government railroad. The expenditure contemplated for 1922 might logically be followed with increased expenditures for a year or two thereafter, with every prospect of ample returns from expenditures made.

The Kantishna Road.—It would seem as though the road into the Kantishna country, from the point where the railroad crosses Riley Creek, near mile 347, would open up vast areas of apparently low-grade ore, which, in the nature of things, would find a way to the railroad for transportation to smelters. Undoubtedly, for a number of years, the railroad should look to the carrying of ore for its largest gross tonnage, and from all indications this district is the most promising of heavy shipments. Representatives of the Geological Survey and of the Bureau of Mines have been through the Kantishna district on various occasions and have pronounced unequivocally their version of vast quantities of ore in sight. It would seem as though very liberal allowance should be made for the early construction of this road into the heart of the Kantishna district, with probable extensions to Lake Minchumina and Ophir, which extensions have been referred to in a cursory manner in the paragraph above. It is not improbable that this road to the Kantishna, in conjunction with that to the Cache Creek district, are two of the most important mining feeders that the railroad will have, unless new discoveries may be made elsewhere.

Dunbar-Fort Gibbon.—This road, which practically parallels the drainage of the Tanana River, and which should pass through the Hot Springs and Tofty mining districts, is one which will ultimately carry a great deal of traffic from Yukon River points and adjacent districts to the railroad. As a mail route into the vast territory west and northwest of Dunbar, it is reasonable to expect a considerable flow of traffic along with its entire course, in both directions. At or near Tofty a branch might well be given a preliminary estimate, toward the rapids on the Yukon, as a probable route to the Koyukuk mining region and to the undeveloped areas to the north.

Fairbanks-McCarty.—Liberal allotment should be allowed for the prosecution of the improvement of this stretch of highway for each of several years to come. A main wagon road through this district will make available the vast agricultural resources of the Upper Tanana Valley, and it is to the agricultural development, as well as to the mining, that the railroad must look for its permanent source of income. Thousands of acres of arable lands lie adjacent to this project, and the construction of an improved wagon road will serve to stimulate the cultivation of these lands and to bring the homesteader to the interior of Alaska. Inasmuch as this section of the road is a portion of the through road from Chitina to Fairbanks, its intensive and permanent improvement is of the greatest importance. This portion of the road might well be considered as a part of a through road to the Canadian boundary, somewhere in the neighborhood of the headwaters of the Tanana River. An appropriation of \$75,000 for each of the seasons 1922 and 1923 would be none too great; in fact, if this recommendation will carry any weight at all, it is suggested that the 1923 allotment be considerably increased.

Chatanika-Miller House.—Among the several projects to which your letter makes reference, perhaps this extension of the present narrow-gauge railroad (ending now at Chatanika), to run thence northeasterly to Miller House and eventually to Circle, is one of the most important routes leading from the railroad line. It might well be that eventually the narrow-gauge railroad could be extended up the Chatanika River for a distance to certain apparently low-

grade mining districts that have been proven to exist in that vicinity. Until such projects have shown some progress toward development, wagon roads only should be considered. In connection with the territory adjacent to the Yukon drainage and Circle, reports are of frequent occurrence that appreciable bodies of ore are being uncovered in that section; and if it is possible to do so, the prospector and miner should be encouraged by way of proper and economical lines of communication to seek an outlet by way of the railroad.

Expenditures for several other branch roads are noted in your reference to contemplated work for 1922 and 1923, to which no specific answer is given at this time. The acquaintance of the physical character of the immense terrain adjacent to our new railroad, which you have acquired by personal observation and through the reports of your field forces, undoubtedly has placed you in a position to make recommendations that are not subject to comment from us who have confined our efforts more directly to the country immediately adjacent to the main line of the railroad. Any route that has hope of development of the resources contiguous to it will just as surely stimulate production and tonnage for the railroad as it will to strengthen activity in the immediate vicinity of the territory through which it runs. Without these trails and roads and feeders of all classes in general, the railroad as now built will not fulfill all the purposes which we should reasonably expect it to fulfill.

To supplement the information now in your hands on this subject, permit me to call attention to a report on proposed wagon roads, as feeders to the Government railroad, which was prepared by Mr. Frederick D. Browne, who has been the engineer in charge of the northern division of the railroad project for several years. Mr. Browne has not only been in an excellent position to observe conditions in that section, but what is more, he has had a very great interest in interior Alaska and has made an intelligent study of many of the problems constantly before the pioneer for solution. A copy of Mr. Browne's report is inclosed herewith.

Wishing you success in your efforts to open this northland by roads and trails, I am

Cordially yours,

F. MEARS, *Chairman.*

ANCHORAGE, ALASKA, December 8, 1921.

Col. F. MEARS,
*Chairman and Chief Engineer,
Anchorage, Alaska.*

MY DEAR COLONEL: I have read with considerable interest your exchange of communications with Colonel Steese of the Alaska Road Commission, regarding the construction of wagon roads and trails in Alaska, more particularly those roads and trails which may be considered as feeders to the new Government railroad.

It goes without question that a main line passing through a more or less barren country, even though it may join populous sections, is working at a very great disadvantage. It, in a measure, resembles a bridge across a large stream from which there is little or no revenue and there is always considerable expense against it for operating. This, in fact, is the character of our road between Anchorage and Nenana. or shall I say perhaps between Wasilla and Nenana. Through this intermediate section there are vast latent possibilities in the way of mines and agriculture which will produce little or no interest in the way of revenue to our road until joined to it by some means of transportation.

As to the character of these feeders—whether wagon roads or railroads, and if the latter, whether standard or narrow gauge, or whether they are simply first-class trails—these are all matters which will need speedy investigation and decision, but which at this time are largely matters of speculation.

My impression has always been that under the stimulus of proper coordination between the Alaskan Engineering Commission and the Alaska Road Commission, which coordination is very essential, the proper character of road should be determined in advance and plans made to construct such a form of road either at the outset or by slight alterations at some later date. For example: There might be a road projected into some new district where an occasional 4 or 6 per cent grade is used and where a few such stretches only

are required. It is possible that by eliminating these short stretches of heavy grade and reducing to a uniform $2\frac{1}{2}$ or 3 per cent grade a very little additional cost would be required, and the road might eventually be suitable for a railroad grade, either standard or narrow gauge. This, of course, in many cases is neither expedient nor advisable, but it might be well to bear it in mind as locations are made for new roads.

The character of tonnage most acceptable to a new railroad, such as ours, is, undoubtedly, the product of the mines in carload or trainload quantities. Such quantities could be produced only from coal mines on the one hand, or, large bodies of fairly low-grade smelting ore on the other. It is without question that a road into a placer mining camp will develop only a limited amount of tonnage. There will be passenger transportation and supplies for their subsistence, and small tools for mining, which in themselves aggregate a minimum amount of tonnage. The output of the gold placer mines is very limited, naturally, and might more readily be considered as express matter than as freight. On the other hand, a road into a hard-rock country, where large quantities of ore are produced, will create this trainload quantity, to which reference is made, on the back haul. There will be, as before, the passengers and the small tools and mining machinery going in, but with the added freight from the products of these quartz ledges going out.

Such a region is the Kantishna mining district, situated westerly from mile 350 on the Government railroad. A portion of the McKinley Park is traversed in reaching the Kantishna center of activity and a road in there from whatever point may be selected on the railroad as a junction, will, undoubtedly, be one of the most favorable for the creation of an early tonnage for the road. All who have examined this territory declare that there is immense tonnage of valuable ore in sight. Even though this were not made available for some little time, it is no less important that McKinley Park be made available to the public, and that a start be made in opening up the country adjacent to the headwaters of the Iditarod and Kuskokwim Rivers via a route which shall pass near Lake Minchumina. Such a through line would be accessory to the proposed route through Rainy Pass to McGrath and Ophir and need in no wise conflict, as two immense territories would be opened by the two different routes. This road into, and perhaps to be extended beyond the Kantishna district, I believe, is the first and most important one that should be undertaken by the Alaska Road Commission.

I notice that in the estimates for the year 1923, Colonel Steese has allotted \$100,000 for the Talkeetna-Cache Creek road, and a similar amount for the Kantishna road. Cache Creek is not likely, in the ultimate analysis, to produce anywhere near the tonnage of the Kantishna district—either in or out. It is possible that the engineers for the road commission have information that will indicate that my impressions are not well founded. If so, a similar amount to each district would be considered consistent; but, if my information is not misleading, and if \$200,000 is available for these two districts, I should say that Cache Creek might preferably receive \$50,000 and Kantishna \$150,000.

There is no wish, of course, to attempt to outline details of the method of expending the money that is available, and if, in the above comparative analysis of the Cache Creek and Kantishna roads, I have referred to actual dollars, it is merely in the way of example. It may be that \$100,000 for each is quite the proper thing, but by referring to amounts I have merely tried to emphasize the matter of relative importance of those districts from which railroad tonnage may be anticipated for our main line.

* * * * *

If the projects as outlined by Colonel Steese for his 1923 work can be well established at that date, very substantial progress toward developing traffic on side roads would be noted. I can see no reason to offer any suggestions as to alterations in the plans as outlined. On the other hand, it is worth while noting that Colonel Steese has laid great importance on the Fairbanks-McCarty and on the Chatanika-Miller House extensions and improvements.

I believe that every effort should be made to induce Congress to appropriate funds for the extension of the railroad, and even under the assumption that this is promptly and willingly granted, that no less importance be given the necessity of improving and extending all wagon roads and trails adjacent to the railroad that they may be producing tonnage and make the railroad what

it should be, i. e., a unit in the development of Alaska. Notwithstanding the expenditure of more than \$50,000,000, a start has only been made, and I think this is recognized by all.

Yours very truly,

FREDERICK D. BROWNE,
Engineer in Charge.

In my supplemental estimates for 1923 (total, \$1,061,500), the following amounts are provided for the specific subprojects mentioned in the foregoing letters, aggregating about 40 per cent of the amount estimated for the entire Territory:

Mileage.	Name of route.	Items.			Total.
		I. Repair and maintenance.	II. Improvement.	III. New construction.	
11	Palmer-Mile 264.....	\$5,000			\$5,000
29	Wasilla-Willow Creek.....			\$10,000	20,000
15	Wasilla-Knik.....	10,000			
300	Nancy-Rainy Pass.....	10,000			10,000
42	Talkeetna-Cache Creek.....	5,000		95,000	100,000
75	Kantishna.....	10,000	\$20,000	70,000	100,000
148	Dunbar-Fort Gibbon.....	10,000			10,000
90	Fairbanks-McCarthy.....	75,000			75,000
130	Chatanika-Miller House.....	20,000	70,000		90,000
	Total.....	145,000	90,000	175,000	410,000
840	Per mile.....	174			
205	do.....		439		
161	do.....			1,087	
840	General average, per mile.....				488

Item III. New construction:

(a) Wasilla-Willow Creek (29 miles)----- \$10,000

This subproject is the backbone of a system of Alaska Road Commission and Territorial roads covering the Matanuska agricultural valley and the Willow Creek mining district. This system serves Knik at tidewater on Cook Inlet; Wasilla, Palmer, and Matanuska, on the United States Government Railroad; the Willow Creek, Hatcher Creek, and Archangel Creek mines; and the farmers on both sides of Matanuska River. The system aggregates about 80 miles now in service. Over 2,000 tons of supplies were delivered by the railroad at Wasilla and hauled over the main road to the Willow Creek mines during the past season.

During 1908-1920, this district has produced about \$2,000,000 in gold and silver, recovered by rather crude milling practice. The improved transportation facilities now being provided are resulting in much larger operations in this lode district. The new construction (about 10 miles) contemplated, consists of an extension of the main road up Willow Creek and a spur up the Little Susitna River.

(b) Talkeetna-Cache Creek (42 miles)----- 95,000

This subproject is the most important tributary to the United States Government Railway south of Broad Pass. A trail has been maintained by the commission for many years—development in the district reached sufficient proportions several years ago to justify a wagon road.

In 1920 the Territorial board allotted \$30,000 to this as a cooperative project, followed by \$10,000 in 1921. With this money, supplemented by its own funds the Alaska Road Commission opened up a winter sled road over which 500 tons passed last winter at a saving of 3 cents per pound or \$30,000 as compared with the previous rate. About \$100,000 per year should be allotted to this subproject until the entire mileage is built up to wagon-road standard.

(c) Kantishna-United States Government Railway (75 miles)----- 70,000

The Kantishna first attracted attention as a placer district many years ago. The placers have produced about \$500,000. In investigations by the United States Geological Survey, the United States Bureau of Mines, etc., now indicate it as the most promising lode development north of Broad Pass and tributary to the United States Government Railway. Some 2,000 tons of very high-grade (about \$170 per ton) ore have been shipped out on the winter sled road to the headwaters of the Kantishna River during the past two seasons. This ore must then be taken down the Kantishna, Tanana, and Yukon Rivers to Bering Sea, and around to Tacoma, Wash., to the smelters. An entire year's supplies for the district must be taken in over the existing trail during the short season with a corresponding high cost for investment, storage, insurance, and transportation.

With access to the Government Railroad by means of wagon road and all-year-round service by truck or bobbed (horses), prices would im-

Item III. New construction—Continued.

immediately drop sufficiently to permit handling vast bodies of low-grade ores and gravels—milling machinery could then be shipped in. Such a road will cost about three quarters of a million dollars including maintenance and repair of the completed sections during the construction period. Our reconnaissances and surveys have reached the point where \$70,000 could be profitably expended on this subproject next season and \$200,000 the second season. The subproject is too large to be attempted with our present resources. This is the most important item of new construction. Initiation of the work was justified from an economic standpoint several years ago, and relief is now urgently needed. The Territory has contributed substantial amounts to assist us in maintaining the existing trail system and will no doubt continue to do so to the limit of its resources. Last winter the citizens of Nenana raised about \$1,500 by popular subscription for an improved winter trail.

Total, Item III----- \$175,000

It will be noted that I have included only \$175,000 under Item III, new construction. These three subprojects on the Government Railway are the only new construction included, the other 14 subprojects provided for in my original estimates having been eliminated in the supplemental estimates. The balance of the supplemental estimates is for the maintenance, repair, and improvement of the existing system. The above estimates do not provide for the completion of any of these subprojects but only for a reasonable progress next year, based upon a 10-year program. Work should have been initiated two years ago at the close of the war period. Vigorous efforts should now be made to complete this work, or the eventual cost will be greatly increased and the development of the Territory will be delayed.

If the provisions of the Federal highway act of November 9, 1921, were applicable to Alaska on the same basis as to the Western States, there would now be available for this season's work, \$4,934,124, and corresponding amounts from the Post Office appropriation bill. We are asking for less than one-fourth of that amount, or only \$1,061,500.

The House bill, as passed, instead of carrying my supplemental estimate of \$1,061,500, allows only \$425,000, an amount \$78,500 less than the amount (\$501,500) estimated under Item I, above, as necessary merely to keep the existing system alive. Item II, \$385,000 additional, is absolutely necessary if we are to make any real progress in completing to uniform standard intermediate sections of existing routes. It will not complete this work by any means, but merely enable a reasonable amount of yearly progress to be made.

Item III, \$175,000 additional, is necessary if we are to make any real start on the \$3,000,000 worth of work needed to provide the United States Government Railway with highway feeders from actual producing districts. We could clean up the whole program in three years if funds were provided and thereby cut down more rapidly the operating deficit on the railroad.

Since 1918 the commission has been charged by Congress with responsibility for the construction and maintenance not only of "military and post" roads in Alaska but of "other roads, bridges, and trails" as well, as explained heretofore. The item, as submitted by the Director of the Bureau of the Budget, omitted the words "military and post" from the title of the appropriation. The House subcommittee restored the original language. It is recommended that these superfluous words be dropped in accordance with the recommendation of the Budget.

Major BROWNE. Colonel Boggs is here and would like to speak about the items for the office of Chief of Engineers appearing on page 63 of the bill.

STATEMENT OF COL. FRANK C. BOGGS, CORPS OF ENGINEERS.

OFFICE OF THE CHIEF OF ENGINEERS.

Senator WADSWORTH. Very well, Colonel Boggs, you may proceed.

Colonel Boggs. I am the assistant to the Chief of Engineers in charge of the military division of the Chief of Engineers' office. It might be well to make a brief statement in regard to the duties of the Office of the Chief of Engineers so that you may know the reason for my request that the amount carried in the House bill of

\$125,000 under the proviso on page 64, line 13, be restored to \$150,000, as was carried in the Budget. That is the reason for my appearance this morning.

The Office of the Chief of Engineers has two main functions, civil and military. The civil section of the office handles the work of river and harbor improvements and all allied work charged to the Corps of Engineers; that branch of the office is practically permanent and is about the same now as it was before the war; there has been very little change in the personnel in that particular section of the office.

In the finance division of the office, which handles in general the finances for the river and harbor section, there has been practically no change.

MILITARY DIVISION.

The other main division of the Chief of Engineers' office is the military division. The military division has charge of the military work of the Corps of Engineers just as the Chief of the Infantry has charge of the military work of the Infantry and the Chief of the Field Artillery has charge of the work of the Field Artillery, and so on; and in addition, the military division of the Office of the Chief of Engineers has a supply section which the other combatant arms do not have. We also have a construction section in charge of the construction of the fortification works, and also a map and mapping section which has, in general, charge of the map work of the Army.

That is a very brief statement; I can elaborate it by inserting this more detailed statement in the record, if you would like to have it, Mr. Chairman.

Senator SPENCER. Is that in addition to what appears in the House hearings?

Colonel Boggs. It is in addition to what I have said. This statement, I think, is rather more complete than that which was given in the House hearings by Major Godfrey on page 1076. On the other hand, the statement given in the House hearings is quite complete.

Would you care for me to insert in the record this more elaborate statement? However, I think if reference is made to the House hearings, that is all that is necessary.

I think it is well to explain where the money for the Chief of Engineer's office originally came from and where it is under this particular bill. We now have what is known as the regular or statutory roll, which, under the House bill, is given on the bottom of page 63; we also have what is known as the additional roll of \$10,000 for this year, but which is cut out for next year—we have no additional roll for next year; we also have what we call the allotment roll, which is covered on page 64 of the bill, lines 12 to 16. That is not an appropriation under this particular item; it is merely an authorization to use certain funds under other appropriations for the employment of civilian assistants in the office of the Chief of Engineers.

TOTAL APPROPRIATIONS FOR 1922.

For this year we have a total of the regular roll of \$112,510, the additional roll of \$10,000, and the allotment roll of \$150,000; so we have a total authorization of \$272,510.

Senator WADSWORTH. Two hundred and seventy-two—

Colonel BOGGS. Five hundred and ten.

Senator WADSWORTH. \$272,510.

Colonel BOGGS. Under the bill as passed by the House we have the regular roll of \$109,010, and an allotment of \$125,000, making a total of \$234,010.

Senator WADSWORTH. \$234,010?

Colonel BOGGS. Yes, sir; the minimum estimates that we can arrive at for properly carrying on the work of the office of the Chief of Engineers is a total of \$257,144.

Senator SPENCER. Made up how?

Colonel BOGGS. Made up of the regular roll and the personnel which you have charged to the allotment roll.

Senator SPENCER. How much under the personnel roll?

Colonel BOGGS. Beg pardon?

Senator SPENCER. How much under the personnel roll in increase of what the House gave you do you feel is necessary?

Colonel BOGGS. \$25,000 on the allotment roll. That is on page 64.

Senator SPENCER. That is the allotment roll, not the statutory roll?

Colonel BOGGS. Yes, sir; we are asking for no increase in the statutory roll.

Senator SPENCER. That is all you want is \$125,000 made \$150,000.

Colonel BOGGS. Make it \$150,000; yes, sir.

Senator WADSWORTH. How long have you had the addition of this allotment roll in preceding appropriation bills?

Colonel BOGGS. The allotment roll has been carried for some time in connection with river and harbor work. I do not know that I have the exact date on which that starts—25 or 30 years—it was formerly \$50,400, that allotment roll.

Senator WADSWORTH. Up to what date?

Colonel BOGGS. Up to 1918.

Senator WADSWORTH. Up to 1918?

Colonel BOGGS. Yes, sir; and then it began to increase—I have it here—in 1920 the Army bill carried a similar provision for the military section of the office of the Chief of Engineers. In other words the allotment then, under the old legislative, executive, and judicial appropriation bill was an allotment for carrying on the civil work in the office of the Chief of Engineers. In addition to the statutory roll in 1920, the Army bill carried a similar allotment under the military item for the military section of the office of Chief of Engineers. In 1922 those two were put together and carried in the legislative, executive, and judicial appropriation bill at \$150,000 and made applicable either to employees for the civil work or for the military; and that is what we are asking now, for employees either for the civil or military section of the office.

Senator WADSWORTH. Have you any data with you which can show us, which can tell us, how many clerks you had, regular, additional, and allotment in 1914?

Colonel BOGGS. No, sir; I have not that data for 1914.

Senator WADSWORTH. Have you it for 1915 or 1916?

Colonel BOGGS. But I have it here for 1917, but it includes the employees in what was at that time known as the engineer depot, which section was transferred to our office. We have no engineer depot in Washington and the work which was carried on down there in con-

nection with the general supervision of the supplies has been transferred to the office so that should be added.

NUMBER OF EMPLOYEES, BY YEARS.

Senator WADSWORTH. That is what I want to know.

Colonel Boggs. On the 1st of January, 1917, there was 161, including that force.

Senator WADSWORTH. One hundred and sixty-one clerks?

Colonel Boggs. Yes, sir.

Senator WADSWORTH. In the office of the Chief of Engineers?

Colonel Boggs. Yes, sir.

Senator WADSWORTH. What were they in 1918?

Colonel Boggs. In 1918, the 1st of January, it had risen to 262, and in the middle of 1918 it had risen to 726.

Senator WADSWORTH. Is that your peak?

Colonel Boggs. Yes, sir; I have a sketch here if you would like to have it.

Senator WADSWORTH. Seven hundred and eighty-six is the peak?

Colonel Boggs. Seven hundred and twenty-six; I beg pardon.

Senator WADSWORTH. Seven hundred and twenty-six is the peak during the war time?

Colonel Boggs. Of the war organization; yes, sir.

Senator WADSWORTH. Now, how was it in 1919?

Colonel Boggs. On January 1 it was 311, and it gradually decreased to the first of 1921 when it was 213.

Senator WADSWORTH. In 1921 in had dropped to 213?

Colonel Boggs. Yes, sir. I skipped 1920 because I have not the actual figures, but there was very little difference there.

Senator WADSWORTH. It went down to 213?

Colonel Boggs. Yes, sir.

Senator WADSWORTH. How many now, for 1922?

Colonel Boggs. We have at the present time—well, at the first of the year 1922 we had about 188.

Senator WADSWORTH. One hundred and eighty-eight?

Colonel Boggs. Yes, sir; and we are asking for 176 for next year. In other words, that is an increase of only 15 over January 1, 1917, and that is partly accounted for by the increase of the military work and the supply work that we are now doing.

Senator WADSWORTH. And the \$25,000 that you are asking to be put back will cover those 15 clerks?

Colonel Boggs. That is what we want, yes, sir; that is all I am asking for. I can go into more of the details of the matter if you desire.

Senator WADSWORTH. Just a moment; the figures for 1917 of 161 clerks includes the engineering depot?

Colonel Boggs. It included the force in the Engineers' Depot which was doing the same work that the supply section in the military section of the Chief of Engineer's office is doing now. Would you care to have this, Mr. Chairman, to refresh yourself with?

Senator WADSWORTH. Yes.

(Colonel Boggs hands the chart.)

Senator SPENCER. In the statutory amount that is given you by the House you have how many, 82?

Colonel Boggs. I think that is it, Senator Spencer; I have it here somewhere; 82, yes, sir.

Senator SPENCER. And the balance of the 176 will be taken care of by this—

Colonel BOGGS. By the allotment roll.

Senator SPENCER. \$150,000?

Colonel BOGGS. Yes, sir. I might invite the attention of the committee to the fact that the statutory roll is \$109,010, which compares with the statutory roll of this year plus the additional roll, or a total of \$122,510.

Senator WADSWORTH. I understand that at present you have three rolls?

Colonel BOGGS. We have three rolls at the present time. The allotment roll dies out at the end of this year and, as a matter of fact, we are—

Senator WADSWORTH. The additional roll?

Colonel BOGGS. Yes, sir. I should have said the additional roll. The additional roll dies out at the end of this year; yes, sir.

Senator WADSWORTH. Did you have anything else?

Colonel BOGGS. Nothing, unless you wish more information in regard to this item.

Major BROWNE. Mr. Chairman, Colonel Fair, of the Assistant Secretary's office, is here in connection with the national parks ready to give the committee information in case they want it.

Senator WADSWORTH. We will have to get out for lunch pretty soon.

Colonel FAIR. I can wait, Senator.

Major BROWNE. I thought you might want to ask him some questions.

Senator SPENCER. On what page is this, Major Browne?

Major BROWNE. That is on page 116.

Colonel FAIR. These are the five national parks—Gettysburg, Shiloh, Chickamauga, Guilford Court House.

Senator SPENCER. As the House passed it, Colonel, it is reasonably satisfactory, is it not?

Colonel FAIR. It gives the amounts except the amounts for the procurement for an automobile for the Chickamauga and Chattanooga National Military Park. There is a provision there directing the Secretary of War to furnish an automobile for that park from the Army supply. It is very objectionable; we did not have the authority; we had to get it from the Agricultural Department.

Senator SPENCER. But you got the automobile just the same?

Colonel FAIR. We got it just the same.

Senator WADSWORTH. You estimated \$40,000 and they have given you \$38,400?

Col. FAIR. We have accepted a cut in the estimate and I am not authorized to defend any other estimate than the one that was passed by the House committee. The secretary is abiding by the estimate allowed by the House committee, but there are certain things in connection with this national military park, such as the keeping up of road systems and making repairs that necessitate the use of an automobile to carry the men and tools. They have an old Cadillac there that is 14 years old; but it requires a great many expensive repairs. There are 100 miles of road to be maintained.

Senator WADSWORTH. The committee will adjourn to 2.15.

(Thereupon at 1.30 o'clock p. m. an adjournment was taken to 2.15 o'clock p. m.)

AFTERNOON SESSION.

The committee reconvened, pursuant to the taking of the recess, at 2.15 o'clock p. m., Senator James W. Wadsworth (chairman) presiding.

STATEMENT OF BRIG. GEN. HARRY TAYLOR, ASSISTANT CHIEF OF ENGINEERS, UNITED STATES ARMY.**PREVENTION OF DEPOSITS, HARBOR OF NEW YORK.**

General TAYLOR. There are two or three items, Senator, I want to speak of. The first is on page 113 of the bill.

Senator WADSWORTH. Lines 14 to 19, "For the prevention of deposits, harbor of New York."

General TAYLOR. Yes, sir. The estimate which was submitted by the Engineer Department for this work, and which I believe was allowed by the Director of the Budget, was \$224,000.

Senator WADSWORTH. That is correct.

General TAYLOR. The work which is carried on with that appropriation is the supervision of New York Harbor, with a view to the prevention of illegal deposits. The work is carried on under an officer who is known as the supervisor, who under the law is a naval officer detailed for duty under the Secretary of War. He reports to the Chief of Engineers.

Under the system which is in vogue very strict inspection is carried out to prevent any illegal or improper depositing of material in the harbor. A great amount of material is excavated in the course of a year in the work which is carried on in and around the city of New York, not only from dredging in and around slips, but also building excavations, a very large amount of rock is taken out, and that must be taken out to sea and dumped in deep water; otherwise serious damage to navigation may result.

For several years the appropriation has been in the neighborhood of \$125,000. On account of the increased cost of everything, particularly the operation of the vessels, that appropriation has become insufficient, and for the last four years the fleet which is used in that supervision has been gradually deteriorating. The appropriation has not been sufficient to maintain the fleet in proper condition.

Last year the vessels became in such bad condition that we were forced to condemn and sell one of them.

The others are in very urgent need of repairs.

Senator WADSWORTH. What vessels have you?

General TAYLOR. We have five tugs and a launch. One of the tugs is laid up a considerable portion of the time.

In the report of the chief of engineers for 1921, on page 2,023 is given a statement of the condition of these vessels. (Reading:)

The *Cerberus*, built in 1905, is the only one of the fleet really fit for outside duty and capable of staying at sea for any extended interval. The vessel was repaired as far as possible two years ago but is now in need of further urgent repairs, amounting to \$25,000, the principal items of which are new boiler, new propeller, main and auxiliary engines and feed pumps overhauled; new floor in engine room.

The *Lamont*, built in 1895, and in continuous service for 26 years, is in need of urgent repairs that have been postponed or have developed in the last two years, amounting to \$21,000, the principal items of which are new steering gear, 11 new reverse frames, new auxiliary air pump, smokestack, and general overhauling.

The *Scout*, built in 1896, and of a type unfitted for rough weather, is in need of repairs, amounting to \$3,000, the principal items of which are new patches on hull and general repairs to machinery.

The *Vigilant*, built in 1900, is in fair condition. This vessel was constructed principally with a view to employment for inspections along the water front, Hudson River, and Long Island Sound. It is consequently not adapted for outside patrol duty, but has been so employed at times, taking the place of one of the outside patrol vessels out of commission. It is in urgent need of repairs, which should be made as early as possible, amounting to \$32,000, the principal items of which are new boiler, new air pump, and general overhauling.

The *Lookout*, built in 1896, has since been kept running regularly, except during the winter months, during which period the mate in charge is employed on shore inspection. This boat is in good condition.

In the system which is employed one vessel patrols the water front generally. Another vessel is stationed at the Narrows to check up the permits. Another vessel is outside Ambrose Channel lightship to again check them up. Then a fourth vessel is kept along on the Long Island and East River water front and on general patrol duty.

Unless these vessels can be repaired, I am afraid that during the year their condition will become such that we will have to lay them all up, with the result that there will be no supervision, practically, of the dumping.

Senator WADSWORTH. The masters and crews are paid out of this appropriation?

General TAYLOR. Yes; the entire expense is paid out of this appropriation. The masters and crews and office expenses and everything connected with this supervision is paid out of this money.

Senator HARRIS. Do you think it is necessary to have the \$224,000?

General TAYLOR. Yes; I certainly do. I think it is a very urgent appropriation.

USE OF NAVAL VESSELS.

Senator JONES of Washington. Let me ask you this: Why can not naval vessels be used for that purpose?

General TAYLOR. I think they would cost much more than these.

Senator JONES of Washington. We have to maintain naval vessels and keep them going.

General TAYLOR. If naval vessels could be detailed for that duty—

Senator JONES of Washington. That is what I mean.

General TAYLOR. That would be all right, but the cost would undoubtedly be more.

Senator WADSWORTH. Has not the harbor master got a number of craft?

General TAYLOR. Nothing that we can get. We have been all over the surplus property and other property looking for vessels that we could use. We did get from the Quartermaster Department a tug, which would be a very excellent tug, exactly adapted to this outside service, but it will cost \$100,000 to put it in shape. It is a seagoing tug, used abroad in very hard service during the war, and came back in bad shape. We thought we were getting something which was going to help us out very much indeed, but we found that it would be an expensive overhauling job to put her in such condition that she could be used. A vessel of that kind to build, even at the present time, would cost upward of \$200,000. That vessel really is rather larger and more expensive than the type which

we wished to use. We have to have one or two—we ought to have two—good, seaworthy vessels which can keep outside Ambrose light-ship in any weather; and the others can be medium-sized harbor tugs, which are relatively inexpensive to operate.

Senator JONES of Washington. Why do you say that it would cost more to have the Navy do this?

General TAYLOR. I think their vessels are larger, Senator, nearly all of them, and they have larger crews on them.

Senator JONES of Washington. But they do have small vessels.

General TAYLOR. They have very few small vessels.

Senator JONES of Washington. Would not those small vessels be especially desirable for your work inside the harbor?

General TAYLOR. No, sir; they have nothing that we can get from them, if that is what you mean.

Senator JONES of Washington. It seems to me that the Navy should operate the vessels and use them. This is to prevent violations of law?

General TAYLOR. Yes, sir; it is to prevent violations of law. There is a specific law authorizing this work and specifying how it shall be done. If we could get a half a dozen small naval vessels which could be put under the Secretary of War, to operate under the direction of the chief of engineers for this work, it would be quite satisfactory, if we could keep them.

Senator JONES of Washington. Yes, of course.

General TAYLOR. It is quite important that the men in charge shall be continuously in charge, so that they will know what to look out for. If a vessel was detailed, we will say, for three or six months, I am afraid it would not be so serviceable, because by the time they really discovered the proper thing to look out for the detail would be up.

Senator WADSWORTH. I do not believe it would be a good idea to take naval personnel any more than it would be a good idea to take Army personnel to do this kind of work. It is not military.

General TAYLOR. No, sir; and it is not naval. It is a policeman's job; that is what it is.

Senator WADSWORTH. You employ a civil personnel?

General TAYLOR. Yes.

Senator WADSWORTH. You hire them?

General TAYLOR. Yes.

Senator WADSWORTH. And you run the boats?

General TAYLOR. Yes.

Senator WADSWORTH. Sailors are not trained for this kind of business?

General TAYLOR. No, sir.

Senator WADSWORTH. Neither are soldiers?

General TAYLOR. No, sir.

Senator WADSWORTH. But I suspect, with Senator Jones, that somewhere in the possession of some department of this great Government there are some vessels that might be handed over to you for this work.

General TAYLOR. We would be very glad to find them; we have done our best to find them and could not.

Senator WADSWORTH. You know other departments are very jealous about letting anything go.

General TAYLOR. We have not taken their word for it, but we have hunted around ourselves. The type of vessel that we want is not to be had.

Senator JONES of Washington. What peculiar type do you mean?

General TAYLOR. I mean small or medium-sized harbor tugs.

Senator JONES of Washington. Why do you need a tug?

General TAYLOR. They are easier to handle.

Senator JONES of Washington. Why is not a good swift launch just the thing for your purpose?

General TAYLOR. She could not stay outside in heavy weather.

Senator JONES of Washington. No; but I am talking about service in the harbor. It seems to me that is what you want in there, a swift boat.

General TAYLOR. We want a fairly swift boat.

Senator JONES of Washington. You do not need a powerful tug?

General TAYLOR. No; we do not need a powerful tug; but we ought to have a heavily built boat, because she has to go alongside of tows and alongside of tugboats to take up and supervise permits; and a launch, I am afraid, would be battered to pieces. A launch, to my mind, implies a rather lightly built boat.

Senator JONES of Washington. They use launches to go alongside of boats.

General TAYLOR. I know, but not in rough weather, usually.

Senator JONES of Washington. It is not rough in the harbor. To go outside I know that it needs a different kind of vessel.

General TAYLOR. Yes.

Senator JONES of Washington. But it does seem to me that a swiftly moving boat is just the boat you want in the harbor, to catch violators of the law.

General TAYLOR. I think these boats, Senator, operate just as cheaply as a launch would. We have a small fuel bill with them. The fuel bills are not heavy. They do not have very powerful machinery. A swift boat means powerful machinery and a high fuel bill.

Senator JONES of Washington. It depends on the structure of it and on the weight, etc.

Senator WADSWORTH. You say that you have combed over the quartermaster's fleet?

General TAYLOR. We have done everything we could.

Senator WADSWORTH. There has been a great deal of talk about the tremendous number of vessels that they had that they could not get rid of.

General TAYLOR. I know; we have been in touch with them, because I wanted vessels not only for this work but for work around the dredges, and tenders for other work. We have followed up every clue. I had one man whose principal duty it was to follow up clues, and he did nothing else for several months but go around inspecting vessels. I thought we had found a gold mine, once, but it was not very productive.

Senator JONES of Washington. Have you examined the Shipping Board vessels?

General TAYLOR. Yes, sir.

Senator WADSWORTH. I see the House reduced this item to \$109,260.

General TAYLOR. Yes, sir.

Senator WADSWORTH. Do the House hearings disclose where that \$260 comes in?

General TAYLOR. No, sir.

Senator WADSWORTH. Doubtless there is a reason for it, but I did not know was it was. You have had \$125,000 annually, have you?

General TAYLOR. For a long time we did. I think last year it may have been cut. Possibly that is where they got that figure.

Senator WADSWORTH. The estimate for 1922 was \$109,260. In other words, the House gave you exactly the same amount as the estimate of last year?

General TAYLOR. That was the appropriation for 1922. I was mistaken.

Senator HARRIS. What had it been before that, General Taylor; do you recall?

General TAYLOR. The statement of the appropriations is given in this book.

Senator HARRIS. What was your appropriation for the current year?

General TAYLOR. The appropriation for the current year was \$109,260.

Senator HARRIS. That was the estimate for the current year?

General TAYLOR. No, sir; that was the appropriation.

Senator HARRIS. It was also the estimate; the same amount. I have it before me here. In other words, the department last year estimated \$109,260 and Congress appropriated that sum, and the House proposed to appropriate the same sum this year, although the estimate this year is \$224,000.

General TAYLOR. The estimate is stated in this book I have as \$186,269.

Senator WADSWORTH. The book that I have here shows the estimate for 1922 was \$109,260.

General TAYLOR. Yes, sir.

Senator WADSWORTH. Perhaps it is a revised estimate. I gather from these estimates of 1922 that you want to spend \$99,800 on the repair of the tugs and the steam launch.

General TAYLOR. Yes, sir; that is correct. That is practically the whole of it. And that is due to the fact that the fleet has not been kept in proper repair during the last few years.

Senator HARRIS. If there is delay, that will make the loss greater, will it not?

General TAYLOR. It will; yes, sir.

Senator HARRIS. When you were searching for these boats you were talking about a moment ago, did you get good cooperation from the people that had charge of them?

General TAYLOR. Yes, sir; I think we did. Of course, no department is overanxious to let its best boats go. The boats that they are willing to pass on are the boats which necessarily are in poorest condition or not well adapted to their uses.

SURVEY OF NORTHERN AND NORTHWESTERN LAKES.

Senator WADSWORTH. All right, General, what else is there? Do you have anything to do with the survey of northern and northwestern lakes?

General TAYLOR. Yes, sir; that is an item I was looking for. That is on the same page.

Senator WADSWORTH. I confess ignorance of this work. What is it?

General TAYLOR. This provides for the surveying and charting of all of the northwestern lakes, including also the canals of New York State, Lake Champlain, and Lake of the Woods.

Senator WADSWORTH. How long has that work been going on?

General TAYLOR. It has been going on for a good many years.

Senator HARRIS. How much have you been spending a year on this?

General TAYLOR. About \$125,000. A minute ago, when I spoke of there being an appropriation of \$125,000 for the supervision of New York Harbor, I had in mind this survey.

Senator WADSWORTH. \$107,000 is the figure of the Budget estimates.

General TAYLOR. It was \$125,000, was it not?

Senator JONES of Washington. That is the current appropriation.

Senator WADSWORTH. The Budget estimate was \$107,000.

General TAYLOR. Yes.

Senator JONES of Washington. What is the nature of these surveys?

General TAYLOR. This is a general survey of the lakes, including the plotting of all of the waters of the lakes and all of the harbors; and the Lake Survey issues, at the beginning of each season, a bulletin which gives a description of the condition of all the harbors and a description of the aids to navigation and lights and buoys and things of that kind, and at the beginning of each month it issues a supplement showing any changes that have taken place. That bulletin and the supplements to the bulletin are in very great demand by all of the lake vessels. Of course, every lake vessel carries a bulletin and has the supplements to it.

Then, they buy from the Lake Survey the charts. The charts are sold at the cost of production, at a very low rate.

Senator SPENCER. About two years more after this year will complete it?

General TAYLOR. It should. I think; yes, sir. There is always going to be a necessity for a small appropriation, in order that we may keep up to date. We will have to maintain the office to keep track of any changes that are necessary, to issue the bulletin and supplements to the bulletin.

Senator JONES of Washington. After you get the survey completed, why should it not be self-supporting?

General TAYLOR. The sale of the charts is not sufficient for that. That is the only source of revenue we have.

Senator JONES of Washington. These bulletins you distribute free?

General TAYLOR. Those are distributed free.

Senator SPENCER. What do those contain?

General TAYLOR. They contain a general description of the location of channels and of the aids to navigation; that is, buoys and lights.

Senator SPENCER. Do they give depths of water?

General TAYLOR. They give general data of interest to the mariner.

Senator SPENCER. And depths?

General TAYLOR. Those are given on the charts. They indicate any changes which have taken place in the charted depths.

Senator JONES of Washington. Why should you issue anything in the year except something that showed changes?

General TAYLOR. That is all that we do. The bulletin gives the general description.

Senator JONES of Washington. You do not repeat that every year, do you?

General TAYLOR. Yes, we do; because we tried issuing one bulletin and then issuing supplements to it, and we soon found that it got so complicated, that there were so many changes, that the bulletin was completely out of date and the necessary changes in it were altogether too much for the ordinary master of a vessel to make.

Senator JONES of Washington. Now, for instance, take a canal; what surveys do you make about a canal?

General TAYLOR. You mean the canals of New York?

Senator JONES of Washington. Yes.

General TAYLOR. We made a complete chart of the canals of New York State.

Senator JONES of Washington. Now, you have got that made?

General TAYLOR. That is made, and there is nothing more to it.

Senator JONES of Washington. You do not have anything more to do in connection with that?

General TAYLOR. No, sir; no more to that.

Senator HARRIS. How many men are on the work?

General TAYLOR. It varies at different seasons of the year. During the working season there are about 125 men. During the winter the number is cut down to about 50.

Senator JONES of Washington. How long have you been carrying on this work of investigating the lake level?

General TAYLOR. That has been carried on ever since the lake survey was started.

Senator JONES of Washington. When do you expect to have sufficient information to determine what should be done with reference to regulation?

General TAYLOR. I think we have it now.

Senator JONES of Washington. You do not need any money for that?

General TAYLOR. That is a very small item. It is merely the reading of a few gauges; that is all.

Senator. You asked me how long the lake survey had been in progress. I find that the initial appropriation for the general survey of the lakes was carried in the act of Congress approved March 3, 1841.

Senator JONES of Washington. It looks like that work ought to be completed.

Senator HARRIS. It looks so to me.

General TAYLOR. The reason it has been going on so long is that the appropriations have been insufficient to carry it on at a proper rate. We could have finished it years ago if the appropriations had been sufficient.

Senator WADSWORTH. Is there anything else in the Engineer Corps items that you are authorized to talk about now, General?

General TAYLOR. Nothing that I am interested in, no, sir; except military items. I can speak only of nonmilitary items.

Senator WADSWORTH. You do not touch military items?

General TAYLOR. No, sir; I do not expect to.

ORDNANCE DEPARTMENT.

STATEMENTS OF BRIG. GEN. WILLIAM S. PEIRCE, ACCOMPANIED BY MAJ. CHARLES T. HARRIS, MAJ. CHARLES SCHIMELFENIG, MAJ. R. L. MAXWELL, AND MAJOR QUINTON.

Senator WADSWORTH. On what page is your first item, General?

Major BROWN. The first item is on page 64 of the bill.

General PEIRCE. The first item is the appropriation under ordnance service.

Senator WADSWORTH. Go ahead, General, in your own way.

General PEIRCE. The appropriations for the Ordnance Department fall into two general classes: First, the two appropriations, ordnance service and repairs of arsenals, which are general appropriations not made for manufacturing purposes but for the general purposes of the department.

The purposes of ordnance service are quite well explained by the heading of the appropriation.

The purpose of repairs of arsenals is for the upkeep of the buildings and plants, that part of the upkeep which is not properly chargeable to operations. For instance the upkeep of storehouses is paid for out of repairs of arsenals.

These two appropriations are, to a certain extent, emergency appropriations; that is, they must take care of emergencies that arise during the year. Repair of arsenals, for example, must take care of repairs necessitated by fires or floods or other accidents of that sort.

It is, therefore, more difficult to estimate the precise amounts of these two appropriations than it is of the manufacturing appropriations, which cover very specific projects; and these two are of special importance to us for that reason.

The estimates have been made as carefully as possible. I will call attention to the fact that out of this appropriation during the last fiscal year we turned back something like \$200,000 unexpended, because no emergency arose or other reasons which made it necessary to expend that amount, and a similar practice will be observed this year.

Senator HARRIS. How much did you get last year?

General PEIRCE. Ordnance service, last year, \$2,900,000.

Senator WADSWORTH. That is for the current year.

General PEIRCE. For the current year.

Senator WADSWORTH. The Budget estimate was \$1,400,000.

General PEIRCE. Our Budget estimate this year was \$1,400,000, as against \$2,900,000 last year.

Senator WADSWORTH. The House reduced that to \$1,250,000.

Senator HARRIS. Will the reduction to \$1,400,000 cripple you?

General PEIRCE. No, sir; that is our estimate.

Senator HARRIS. I thought that was the Budget estimate. Can you get along on \$1,250,000?

General PEIRCE. The only answer I can make to that question is that we will do so if possible, but the best estimate we could make was \$1,400,000, and we should very much like to see that amount allowed.

Senator WADSWORTH. Are you doing much purchasing these days of supply ordnance stores?

General PEIRCE. No, sir; I may say that the present policy of the department is this: We are engaged in redesigning practically all

of the important ordnance material in order to embody in the new designs the experience gained in the war, and to have thereby on hand and available the most recent and up-to-date improved designs that we can secure. These designs will be expressed in types matériel, which will be subjected to all the tests that are prescribed and will finally become approved designs—that is, approved by the General Staff—for future manufacture; and they will be held in that condition until they are in turn superseded by other improved designs. We do not contemplate any manufacture of these improved designs other than that of a small number to give them a proper service test.

The first year of the next war will and must be fought practically with the material that is on hand; but the material which would be put into production upon the occurrence of such an emergency would be this improved and up-to-date material. So that our expenditures and the estimates under the manufacturing appropriations are almost entirely for this development work, except in one or two instances, which I can explain, and not at all for production or storage of existing types.

Senator WADSWORTH. I assume that you are improving the 75-millimeter gun?

General PEIRCE. Yes, sir.

Senator WADSWORTH. And the 155-millimeter howitzer?

General PEIRCE. Yes.

Senator WADSWORTH. Have you made any strides in that respect?

General PEIRCE. Yes, sir; in a number of types of guns and carriages. In the case of the 75-millimeter, we have two types already at the proving ground which have undergone quite a test. The next step will be to turn them over to the using services for their tests.

Senator WADSWORTH. When you go to work to improve the French 75-millimeter, which is the gun that we ended up the war with, as I understand it—

General PEIRCE. Yes.

Senator WADSWORTH. How many models, now, do you make? How many new guns do you make?

General PEIRCE. We made—I think it was two new guns. The principal thing, of course, is the carriage. The gun was lengthened in order to get a considerably longer range than the 75 used during the war. Two types of carriage were designed and made, one called the split trail, which gives a very wide angle of fire because the trail is split, and when the gun is in battery—in firing position—it therefore gives a wide angle between the pieces of the trail, in which the breech of the gun can be moved in azimuth.

The other is what is called a box trail, which consists of two parallel parts—sides—that are tied together in rear and up at the axle. The only movement that the breech of the gun can have in azimuth, at considerable elevation, is that between these two sides.

There are advantages, of course, claimed for both types of carriage. The ultimate decision as to which type is preferable will rest with the Field Artillery.

Senator WADSWORTH. Are you making both of those?

General PEIRCE. Yes, sir.

Senator WADSWORTH. Out of this appropriation we are talking about now?

General PEIRCE. No, sir; not out of ordnance service.

Senator WADSWORTH. And a few of other types of guns?

General PEIRCE. In many cases there is but one type—one gun and carriage—and then if that is only partially successful, if there are certain features that need to be improved on that, a second one will be made.

Senator WADSWORTH. Is all the expense of making those experimental types charged to this appropriation?

General PEIRCE. To the ordnance service?

Senator WADSWORTH. Yes.

General PEIRCE. Oh, no; none of that is charged to this. Those are all charged to the manufacturing appropriations which will come up later. This ordnance service, as I said, is not connected with the cost of manufacture or the running of that part of arsenals devoted to manufacture. It covers purchasing, receiving, storing, and issuing ordnance and ordnance stores, comprising police and office duties, rents, tolls, fuel, light, water, and advertising, stationery, typewriters, and adding machines, including their exchange, and office furniture, tools, and instruments of service; incidental expenses of the ordnance service and those attending practical trials and tests of ordnance small arms, and other ordnance stores, for instruction purposes, for publications for libraries, of the Ordnance Department, including the ordnance office; subscriptions to periodicals, operation, maintenance, and repair of motor-propelled or horse-drawn passenger-carrying vehicles. All of those, however, when they do not constitute a part of the manufacturing cost.

Senator WADSWORTH. Do you regard that cut of \$150,000 as serious, which has been made by the House?

General PEIRCE. No, sir. I think we can get along all right without it; but as I said, the \$1,400,000 was as careful an estimate as we could make, and if we do not need it, we will not spend it. As an earnest of that, I wish to refer to our record of last year.

Senator HITCHCOCK. What was the prewar expenditure for that item, General?

General PEIRCE. Very much less, sir; between \$300,000 and \$400,000. But we had less than one-third of the number of establishments then, and an insignificant percentage of the amount of property that we have now.

Senator WADSWORTH. I do not think it would be very inaccurate, would it, to state that if we had appropriated \$1,500,000 annually for several years before we went into the war, under this item, we would have saved several billions during the war?

General PEIRCE. Not under this item. Under manufacturing appropriations.

Senator WADSWORTH. We had nothing designed then. We had to start in de nova when the war broke out.

DEVELOPMENT OF RECUPERATOR OF 75-MILLIMETER GUN.

Senator HITCHCOCK. Those 75-millimeter guns, as I recall, we had great difficulty in this country in making; that is, the difficulty was not so much in the gun as in the recoil, was it not?

General PEIRCE. Yes; the recuperator.

Senator HITCHCOCK. What progress has been made in developing that?

General PEIRCE. We finally succeeded in manufacturing that, and in quantity. It is no longer a matter of concern to us. We can make them—have made them.

Senator HITCHCOCK. The French were supposed to have some secrets that they were very solicitous about, as I remember, and they kept men over here.

General PEIRCE. Not only that, but they told us in the summer of 1917 that if we had their full drawings, they did not believe we could make the recuperator in this country, but we did.

Senator HITCHCOCK. It is no problem any longer, then?

General PEIRCE. No, sir.

Senator HARRIS. General Peirce, you speak of having more arsenals now than formerly. Could you not consolidate some of them now and save a good deal?

General PEIRCE. No, sir; we could not, because of the tremendous amount of ordnance property that we have on hand. It requires a tremendous amount of storage space. Most of these new establishments are storage bases pure and simple, and we have tremendous quantities of ordnance stores of all sorts, ammunition, guns, and carriages in these establishments, which we propose to keep. We are proposing to do away with, I think it is nine, having recently gotten funds for the transportation of the stores from those stations to other permanent storage. That was included in the deficiency bill which was recently passed.

Senator HITCHCOCK. I understood you to say that the large increase over prewar expenditure in this item was due to the number of establishments you now have.

General PEIRCE. The number of establishments and this large amount of property which we have on hand which has to be protected and guarded. This appropriation pays the guards and pays for the handling and issuing of stores at such establishments.

Senator HITCHCOCK. These stores consist, in part, for instance, of guns, do they?

General PEIRCE. Guns, carriages, and ammunition; immense quantities of ammunition and powder.

Senator HITCHCOCK. Are these guns likely to become obsolete?

General PEIRCE. They will, in course of time, sir; but as long as the guns of the same type constitute the main armament of other nations we are on an equality with them until they attempt to re-arm with an improved weapon.

Senator WADSWORTH. These guns were the best going at the end of the war, were they not?

Gesereal PEIRCE. Yes.

Senator WADSWORTH. They were the best guns in 1918?

General PEIRCE. Yes.

Senator HITCHCOCK. When the war closed, were you not using a great many French guns?

General PEIRCE. Yes.

Senator HITCHCOCK. Then how did we acquire these? Have they been made since?

General PEIRCE. Part of these are French guns that we actually used, that we obtained from the French. A large number of them are

guns that were made in this country, that were just being finished, or were finished about the time of the armistice.

Senator WADSWORTH. The fact is that we reached quantity production just about armistice day?

General PEIRCE. Yes.

Senator WADSWORTH. Up to that time our troops used French-made guns that we purchased from them?

General PEIRCE. They did, sir; but many of these French-made guns were made out of American forgings which we sent over there in lieu of attempting to finish them on this side.

Senator WADSWORTH. Yes; I know that.

Senator HITCHCOCK. Are there any captured guns that you can use or will be used?

General PEIRCE. Not except for trophies, and for experimental investigation.

Senator HITCHCOCK. Was there put in the hearings the amount of money that the House has appropriated and that we are appropriating for these new guns?

General PEIRCE. This appropriation is not a manufacturing appropriation. We will come to that later on.

Senator HITCHCOCK. It is administrative?

General PEIRCE. Administrative, and guarding and issuing; all the costs at storage places or taking care of the property and issuing it and guarding it.

Senator WADSWORTH. What other items do you care to call attention to, General?

General PEIRCE. Most of the manufacturing appropriations which are those that follow this last one, "ordnance service," received small cuts in the House. We feel that the Budget estimates under those appropriations were as small as we could get along with without neglecting what we considered to be necessary and important work. Practically all, as I have said, is development work, the designing of improved ordnance, the manufacture of type articles for test; and finally the manufacture of a very few of the successful articles for service tests.

Now, if these cuts that are made by the House stand, it will simply mean that in each case we will have to leave undone some of these projects that we have thought were very advisable and necessary. The amounts, as you see, in every case are small.

ORDNANCE STORES—AMMUNITION.

Senator WADSWORTH. I notice in the next one, under the heading "Ordnance stores, ammunition," it is stated to be, "For the development, manufacture, purchase, and maintenance of airplane bombs," among other things.

General PEIRCE. Yes.

Senator WADSWORTH. You are doing rather extensive development in that?

General PEIRCE. Yes; that is a very important subject because it is a new one that has not yet been thoroughly explored.

Senator WADSWORTH. I notice that the House reduced the estimate by \$3,000. Is there anything in the House hearings that would indicate why \$3,000 was taken off of that estimate of \$511,500?

General PEIRCE. Not to my knowledge, sir.

Senator WADSWORTH. Is there any explanation as to how that figure was reached? Do you know, Major Browne?

Major BROWNE. I do not; no, sir.

Senator WADSWORTH. We will pass that for the present.

Senator JONES of Washington. Would there be as much ammunition likely to be used during the next year for burials at the national soldiers' home, as in this present year?

General PEIRCE. I think there is very little difference, Senator.

Senator JONES of Washington. They have been bringing the bodies of our soldiers back from over in France, and that would probably be all over during the current year. I thought that you might be able to account for that reduction of \$3,000 along that line somewhere, because they would not do so much firing of guns at the soldiers' home, etc.

General PEIRCE. The firing at military funerals is of small arms. I do not know how they did figure that. That is getting down into pretty fine figures.

Senator WADSWORTH. In the hearings \$508,500 was a reduced estimate sent to the House.

General PEIRCE. The change in amount was so slight that I had paid no further attention to it after it came from the House.

Senator HARRIS. You can get along on that all right, can you?

General PEIRCE. Oh, yes.

SMALL-ARMS TARGET PRACTICE.

Senator WADSWORTH. The next item is "Small-arms target practice." I assume that most of that is devoted to the development of machine guns; is it not?

General PEIRCE. It is small-arms material at the present time, part of which is for machine gun .50-caliber ammunition.

Senator WADSWORTH. Machine-gun ammunition. Is most of that \$400,000, which the House appropriated, to be devoted to that purpose?

General PEIRCE. Yes.

Senator WADSWORTH. I notice that this year your appropriation was only \$250,000. You asked for \$500,000, and the House gave you \$400,000. Why do you need more than you had for this current year?

MANUFACTURE OF SMALL ARMS AND SMALL-ARMS AMMUNITION AT FRANKFORD AND SPRINGFIELD.

General PEIRCE. There is one other consideration that I wished to explain that has entered into some of these estimates, and that is the desire to keep at the arsenals a skeleton force to preserve the art of manufacture. In those cases where this development program did not of itself afford the necessary work, and there are two instances of that: One is at Frankford Arsenal where the small-arms ammunition is made; and the other is at the Springfield Armory where the small arms are made.

Now, of the standard caliber 30 ammunition used in the standard service rifle, we have enough on hand for our reserve purposes and for our actual needs for the coming year; but unless we have some money to manufacture some small-arms ammunition at Frankford and some rifles at Springfield it will be necessary to close those departments down entirely and lose all the men that have any knowledge of that sort of work; so that part of this estimate is to provide a little work at those two places. The estimates provide for a little

work at these places in order to keep a very small number of men there.

Senator HARRIS. You say "a little work." How does that compare with the amount before the war or last year? I remember, in the discussion before, that as a matter of fact, we simply made the appropriation for the arsenal in Pennsylvania for Senator Knox after his speech. You remember that. The showing made was that we had all the ammunition necessary. I am in sympathy with what you are trying to do now, to keep a skeleton organization, but to manufacture more ammunition when there is a large quantity on hand would not seem to me just and wise. If I am in error about that, I would like to hear you.

General PEIRCE. We have not sufficient ammunition on hand of all the different kinds of small-arms ammunition. We have enough of the ball ammunition, but there are various kinds of armor-piercing ammunition for use against tanks, and incendiary ammunition for use in the Air Service; and above all, this caliber 50 ammunition that is used in the new caliber 50 machine guns. In those cases we have not any satisfactory quantity on hand. So that we are really accomplishing two purposes with this money; we are keeping a certain small number of men employed and keeping alive a force, and at the same time we are getting ammunition that is needed.

Senator HITCHCOCK. How many men are employed?

General PEIRCE. About 700 at Frankford now. There will be less than 500 after the 1st of July on this estimate.

Senator WADSWORTH. I wanted to ask you to set me straight, at least, and perhaps it will help the other members of the committee also about these different items. Take the bill there, please. Under ordnance stores, ammunition, there is \$508,500 appropriated.

General PEIRCE. Yes.

Senator WADSWORTH. That item begins on line 21, page 65, "For the development, manufacture, purchase, and maintenance of air-plane bombs, of ammunition for small arms, and for hand use for reserve supply." How is that work distinguished from that under the next item, which is "For manufacture and purchase of ammunition, targets, and other accessories for small arms, hand and machine gun target practice and instruction; and ammunition, targets, target materials, and other accessories which may be issued for small arms target practice," etc. That also says for manufacture and purchase of ammunition.

General PEIRCE. The items under the latter appropriation are all for specific purposes of target practice, and the ammunition used in the national matches is special ammunition that is different from the service ammunition.

Senator WADSWORTH. Then you want \$100,000 for target-practice ammunition?

General PEIRCE. And for everything else. I have the details here.

Senator WADSWORTH. Then the ammunition made under ordnance stores is made at Frankford?

General PEIRCE. Yes.

Senator WADSWORTH. Except, perhaps, the bombs?

General PEIRCE. The bombs, of course, are some of them made at Frankford and some at Rock Island.

Senator WADSWORTH. Then that appropriation can be said gen-

erally to be for the support of the Frankford Arsenal; or is some of it for Rock Island?

General PEIRCE. Yes.

Senator WADSWORTH. And the next one; where is that mostly spent?

General PEIRCE. The target material is either manufactured or procured by Rock Island. The ammunition that is purchased, of course, comes from private manufacturers. If manufactured it would be at the Frankford Arsenal.

Senator WADSWORTH. Is there no service ammunition manufactured under the second item?

General PEIRCE. Under the small arms target practice?

Senator WADSWORTH. Yes.

General PEIRCE. There is .30-caliber gallery practice ammunition, for training of the Army; and there is manufacture of .30-caliber gallery practice ammunition for civilian training camps, and there is manufacture of special ammunition for the national matches.

Senator WADSWORTH. Special types of small arms ammunition. It is not ordinary service type ammunition?

General PEIRCE. No, sir; there is some blank .45-caliber pistol ammunition for training purposes.

Senator WADSWORTH. Blank ammunition?

General PEIRCE. Yes.

Senator WADSWORTH. In the "manufacture of arms," the next item, that is at Springfield Arsenal, is it?

General PEIRCE. That is at Springfield; yes, sir.

Senator JONES of Washington. Generally, as to this preceding item, if we should not increase the amount of the House, you would then do, then, of course, those things that you considered the most important?

General PEIRCE. Yes.

Senator JONES of Washington. Do you think that the Army would suffer any real serious injury by losing that \$400,000?

General PEIRCE. I did not get those figures, Senator.

Senator JONES of Washington. There is \$400,000 here for small arms target practice. If we should leave that \$400,000 out, do you think there would be any serious results?

General PEIRCE. I feel that at least \$400,000 will be necessary under this item.

Senator WADSWORTH. I asked you a while ago how it was that this year's appropriation was \$250,000 and next year's \$400,000—why the increase? It seems that there was an unexpended balance from 1921 and available for 1922, and, therefore, the additional appropriation for 1922; was not that it? Have you used up that unexpended balance? I think in the House committee it was stated that there was about \$35,000 carried over.

General PEIRCE. \$35,000 carried over.

Senator WADSWORTH. Then there is a possible \$435,000 available?

General PEIRCE. Yes.

MANUFACTURE OF ARMS.

Senator WADSWORTH. Now, what is the next item?

General PEIRCE. The next item is "Manufacture of arms."

Senator WADSWORTH. Yes; that is at the Springfield Armory. The estimate was \$453,000. What had you expected to do with that?

General PEIRCE. There are a number of small items for continuation of development work in connection with the semiautomatic rifle, in connection with the receiver sight of the caliber .30 shoulder rifle, and a number of other items, one of them \$4,000, and another \$2,000, another \$6,000, and so on; but the main item is for the manufacture of United States service rifles, \$300,000. That is sufficient, it is estimated, to produce about 30 rifles a day, which is a very much smaller number than has ever been produced at Springfield, and the minimum that we figure we can operate the plant for and keep the smallest force there that has been maintained at Springfield within my recollection.

Senator SPENCER. That is, to produce 30 rifles a day, you would need \$450,000?

General PEIRCE. No, sir; \$300,000.

Senator SPENCER. Which, with the other items, would make \$450,000?

General PEIRCE. Yes, sir.

Senator HARRIS. The rifles manufactured are different from the ones used during the war?

General PEIRCE. No, sir; we used two rifles during the war, one the Springfield rifle of the model of 1903 and the other the model of 1917.

Senator HARRIS. I am referring to the Springfield, now.

General PEIRCE. That is this one.

Senator HARRIS. Do you need those rifles? Have you not enough left over from the war to last?

General PEIRCE. Yes; we have a very large stock. This is simply asked for, for the purpose of a continuation of the operation of the Springfield Armory. Otherwise we will have to close it down.

Senator HARRIS. How many men are employed there now?

General PEIRCE. Less than 400, and it probably will go down to 300 or under.

Senator HARRIS. If we reduce that to \$150,000, now, could you not hold a skeleton organization that you could build up in case of necessity?

General PEIRCE. Not all of the employees there, of course, would be engaged in the manufacture of the rifles. The armory has one other function, an issuing function, as well as a manufacturing function. But we do not figure that we could operate the manufacturing plant at a less rate than 30 rifles a day without going to a prohibitive cost; as it is the manufacture has been concentrated in a few buildings and a considerable part of the plant would be absolutely closed up, any way.

Senator WADSWORTH. You have a small rifle manufactory at Rock Island?

General PEIRCE. Yes.

Senator WADSWORTH. That is closed down now?

General PEIRCE. Absolutely closed down, except that they are at present doing a little repairing there. But there is no manufacturing going on.

NUMBER OF RIFLES ON HAND.

Senator HITCHCOCK. How many rifles have we on hand?

General PEIRCE. About 2,000,000 of the model of 1917 rifle, which was the modified Enfield rifle we procured during this war, and about 800,000, I should say, of the Springfield rifle.

Senator HITCHCOCK. Did you develop any difference between them as to efficiency?

Senator WADSWORTH. The Springfield rifle was always regarded as being a little better. We could not make that rifle fast enough.

General PEIRCE. There were three large factories equipped to produce the Enfield, and only Springfield and Rock Island equipped to produce the Springfield model of 1903.

Senator SPENCER. Is the ammunition interchangeable?

General PEIRCE. Yes, sir.

Senator WADSWORTH. This all comes down to the matter of policy. Of course, we do not need the 30 rifles a day that you would make?

General PEIRCE. No.

Senator WADSWORTH. It is only keeping a little organization going so that it will not perish.

Senator HARRIS. That is what I was trying to develop, Mr. Chairman. It seems to me that 150 men would be a pretty good organization. They ought to be able to build up from that. You use how many now?

General PEIRCE. There are about 400 there now.

Senator HITCHCOCK. How many of those are really manufacturing rifles?

General PEIRCE. I should say that probably 100 of those employees are engaged in other—nonmanufacturing—work.

Senator WADSWORTH. You expect to run about 200 men in the actual production?

General PEIRCE. Yes.

Senator WADSWORTH. That includes the semiautomatic rifle work?

General PEIRCE. Yes; everything in the manufacturing way.

Senator WADSWORTH. That is experimental work?

General PEIRCE. Yes. It is tool-room work, pure and simple. They are making models?

Senator WADSWORTH. Of course, that is important, that experimenting in plans?

General PEIRCE. Yes. I was at Springfield just before the war when it was at the lowest point that it had ever been, and we were turning out then 75 rifles a day. We found it difficult to see how we could go to a less number and still run the plant without the cost being prohibitive. We are figuring it down now by concentrating the machines and machine tools, and closing down a large part of the plant, thereby shutting off the heat and power and light so that we can get down to 30 a day, and still operate.

Senator HITCHCOCK. That makes a pretty expensive rifle.

General PEIRCE. Yes; it makes the rifle cost about \$30.

Senator HITCHCOCK. What are other countries doing in the manufacture of rifles—Great Britain, France, and Italy?

General PEIRCE. That I have not any definite information on.

Senator HITCHCOCK. Have they not quit?

General PEIRCE. I do not think they have, sir; not any more than we have. I think they are down to as small a basis as they can run on.

Senator HITCHCOCK. Is there anything about the manufacture of this rifle that is such a specialty that men, expert machinists, could not take it up?

General PEIRCE. Yes; there is. There are things about an instrument of that sort that it is almost impossible to put on paper, that

the workman learns, and really carries under his hat, and we find that wherever a plant of that kind has been closed and the force has been entirely dissipated, it takes a surprisingly long time to collect a new force and get it into satisfactory production.

Senator HITCHCOCK. During the war we did succeed in making several million rifles on rather short notice, did we not?

General PEIRCE. We did, sir; but the only reason they were able to do that was that they had three very large factories, of great capacity and employing many thousands of men, who had been producing this Enfield rifle for more than a year prior to our entrance into the war. Those three factories could be thrown at once on to the production of the modified Enfield, and the modifications were so slight in character that they did not affect the production materially.

Senator HITCHCOCK. Suppose we should actually become engaged in war during the next 10 years, some time; we would have something to start with, something like 3,000,000 rifles. Would we not be able, with that great number to start with, to organize and start in the manufacture, even if we dropped it now, with ordinary good mechanics and experts, in a short time?

General PEIRCE. Of course, to begin with, we would not have the 3,000,000 rifles by that time. There is a certain wastage every year of the stock on hand. I can say that it took a year and a half—about a year and a half—for those factories that I spoke of to get really into production after they started, with all the pressure that there was upon them in the war, before we got into it. It also took us, at Springfield, almost a year to get into full production there, with the war pressure on us. So that these things are not easy. You can not make as much haste as it would seem possible to make. In those times everything makes for delay and nothing makes for acceleration.

Senator HITCHCOCK. You estimate you will make 30 rifles a day there at a cost of \$30 apiece?

General PEIRCE. \$30

Senator HITCHCOCK. Is that correct?

General PEIRCE. That is 10,000 rifles.

Senator HITCHCOCK. So that it takes \$900 a day, really to manufacture rifles that you do not need, virtually for the purpose of keeping men trained for the purpose of manufacture?

General PEIRCE. Keeping the plant alive; yes, sir.

Senator HARRIS. Could you not arrange to have those men manufacture something else and hold your organization together, and let them be at work on something we need instead of on something we do not need? Is there not anything else that you could manufacture?

General PEIRCE. There is nothing else in the ordnance line that that plant would be equipped for making for which we have any more money, at least, than we have for rifles. That is a plant that is specially designed, laid out, and equipped for the manufacture of rifles. Not only the type of machines, but the number required for the different operations are all calculated, and the location and sequence of the machines as placed is determined on that basis, so that it does not lend itself to other purposes.

Senator HITCHCOCK. Are you operating more than one plant?

General PEIRCE. No, sir.

Senator HITCHCOCK. Just that at Springfield?

General PEIRCE. Just at Springfield. The Rock Island plant is closed down.

Senator HITCHCOCK. What was the pre-war manufacture at Springfield?

General PEIRCE. As I said, the lowest that they had ever gotten, to my knowledge, was 75 rifles a day. That was just before the war.

Senator HITCHCOCK. At what cost was that?

General PEIRCE. That was around \$17, Senator, at that time.

Senator WADSWORTH. Wages have gone up in the meantime. Wages have practically doubled?

Senator HITCHCOCK. You said there were 700 men manufacturing ammunition. Does that mean all kinds of ammunition for all purposes?

General PEIRCE. That was the entire activity at Frankford. For instance, there are various kinds of small-arms ammunition, and there are also made there optical instruments and fuses for field artillery. That number was the entire number.

Senator HITCHCOCK. That is, those 700 men were not working on ammunition entirely?

General PEIRCE. No, sir.

Senator HITCHCOCK. What number were working on ammunition?

General PEIRCE. I have not an estimate of that. Major Harris says there were about 300.

Senator HITCHCOCK. Does that mean—have we any other men employed in the manufacture of ammunition than the 300?

Major HARRIS. No, sir; Frankford is the only place we make the small-arms ammunition.

Senator HITCHCOCK. Then, what you had there were employed on ammunition for artillery and other purposes?

Colonel PEIRCE. The only thing done in that line is the manufacture of some fuses, which is at Frankford, and some development work at Picatinny Arsenal in the manufacture of experimental shells and fuses. There is no artillery ammunition and there is no artillery shell being made for service.

NUMBER OF ARTILLERY SHELLS ON HAND.

Senator WADSWORTH. Have you some idea of what stock you have on hand of artillery shell?

General PEIRCE. We have the figures. I do not know that I have them here. I can very readily get them for the record, if you desire.

Senator WADSWORTH. It is all ammunition, is it not?

General PEIRCE. Yes.

Senator WADSWORTH. Am I far wrong in saying that we have about 35,000,000 shells?

General PEIRCE. We had around 21,000,000 to 22,000,000 of 75-millimeter rounds—that is, shell and shrapnel—of which about twelve to thirteen millions, as I recall it, were assembled rounds—that is, shell, cartridge cases, and powder, and everything.

Senator HITCHCOCK. Do they deteriorate?

General PEIRCE. The explosive part of the round will deteriorate; yes, sir.

Senator HITCHCOCK. In what time?

General PEIRCE. We estimate that the powder, the propelling charges, will have an effective life of about 15 years. Some of them

will probably run a little longer than that. Others will not last quite so long.

Senator SPENCER. What was the maximum number of shells fired during a day in the late war, of artillery?

General PEIRCE. I have not those figures. I can tell you the approximate number of 75-millimeter rounds fired by the A. E. F.: it was just under 7,000,000 rounds.

Senator HITCHCOCK. One-third of what we have on hand now?

General PEIRCE. Yes; one-third of what we have on hand. There is a considerable number of those shells being salvaged now.

Senator WADSWORTH. You are trying to salvage some of those shells, are you?

General PEIRCE. Yes.

Senator WADSWORTH. How are you going to dispose of them?

General PEIRCE. We have a contract with a company for taking the loaded shell and unloading it and then disposing of the various parts—the shell itself and the powder.

Senator WADSWORTH. Is the shell good for anything except scrap steel?

General PEIRCE. No, sir; I think that is all it is good for, scrap steel. Then there is the brass in the cartridge case, of course, which is valuable.

Senator HITCHCOCK. That is on the theory that we have an excessive supply on hand now?

General PEIRCE. Yes.

Senator SPENCER. We have about three times as many as were used by us during the war?

General PEIRCE. Yes; we had them. We have disposed of quite a number and are disposing of others. We are retaining about six or seven millions.

Senator WADSWORTH. Twenty-one or twenty-two millions that you mentioned a moment ago was the number with which we ended up our manufacture?

General PEIRCE. Yes.

Senator WADSWORTH. Since then you have disposed of about fourteen or fifteen millions?

General PEIRCE. We have not yet, but we have disposed of quite a number, and we have this contract with this company. We will dispose of them all except about six million.

Senator WADSWORTH. How are you fixed on other calibers?

General PEIRCE. In other calibers there is nothing like that surplus. It varies. In some calibers we have some and in others almost none. I will be very glad to furnish you with a table showing that.

Senator WADSWORTH. I think that is not important for this hearing. I was just getting an idea about your manufacturing things.

General PEIRCE. There is nothing being done in the way of manufacture of artillery ammunition for service.

Senator HITCHCOCK. Why do you qualify on that? Do you manufacture for some other purpose?

General PEIRCE. For development work; for experimental work, a very small quantity; testing new shell or a new fuse, or something of that kind.

Senator HARRIS. How many men have you at Frankford Arsenal?

General PEIRCE. About 700, now.

Senator HARRIS. How many will you reduce to? Did I understand you to say you had 700 at Springfield?

General PEIRCE. No, sir.

Senator HARRIS. Five hundred?

General PEIRCE. Yes; we had 500 at Springfield. The number is less now. It was 500 on January 31, and it is down to approximately 400 now. I can get all these figures for you, Senator, if you want them.

ORDNANCE STORES AND SUPPLIES.

Senator WADSWORTH. What is your next item, General?

General PEIRCE. Ordnance stores and supplies. There was no reduction made by the House there.

Senator WADSWORTH. There is new language there, "except material for cleaning and preserving." What is the significance of that?

General PEIRCE. That is because the material for cleaning and preserving stores, except those at establishments under the Chief of Ordnance, is provided by the Quartermaster Corps.

Major BROWN. The department would like to have a further change in the wording, if I may bring that out.

Senator WADSWORTH. What is it?

Major BROWN. The House, in inserting this, attempted to place all of the work of procuring this cleaning and preserving material under the Quartermaster Corps irrespective of whether the work was done at ordnance arsenals or at posts in the field. It is desired, both on the part of the Ordnance Department and of the Quartermaster Corps that that be qualified so that the Chief of Ordnance procures his own cleaning and preserving material for work done at arsenals under his direct supervision.

Senator SPENCER. What is the language?

Major BROWN. It is desired to add, after the word "preserving," in line 24, the following: "at places other than establishments under the direct control of the Chief of Ordnance."

We will ask a similar change under "Regular Supplies" when that is reached. That is the Quartermaster Corps appropriation. That change is agreed on both by the Quartermaster General and the Chief of Ordnance, and is desired by the Secretary of War.

AUTOMATIC RIFLES.

Senator WADSWORTH. The next item is "Automatic rifles."

General PEIRCE. The principal reduction in this item made by the House occurs in the project for the manufacture of 75 of the 50 caliber aircraft machine guns called for by the Air Service to equip planes that are being delivered to them; the estimate is \$112,500 and the amount allowed under the House disposition is \$62 600; so that that would just about cut the number in two that we could procure, while the number that we are trying to procure is less than the total required by the Air Service.

Senator WADSWORTH. That is merely a matter of allotment, is it not? You could neglect or cut something else besides automatic rifles, and still do better than \$250,000 for those aircraft machine guns?

General PEIRCE. That would be true; but that was the best apportionment of the \$250,000 that we could make, to allow enough for the maintenance work that is necessary and must be done any way.

Senator WADSWORTH. What is that maintenance work, General?

General PEIRCE. There is maintenance of machine guns and automatic rifles, and all the things that relate to that, such as the procurement of spare parts therefor. The estimates for that are \$26,250, and \$50,000, and for machine guns in storage, \$56,300.

Senator WADSWORTH. What is meant by the item "Machine guns in storage?"

General PEIRCE. The overhaul of machine guns, as received from service, turned in by troops, preparatory to putting them into permanent storage. As the Army is decreased there will be larger and larger quantities of these guns come in, and they have to be overhauled, broken parts replaced, worn parts replaced, and the guns properly greased and boxed and put away.

Senator WADSWORTH. Even under the terms of this bill there is not a general demobilization of the Army, General. Would there be many of these guns turned in for permanent storage?

General PEIRCE. I will ask Major Schimelfenig, who has immediate charge of this, to give you the details.

Major SCHIMELFENIG. In addition to the overhaul of machine guns turned in, we have a large quantity of machine guns and automatic rifles in storage, and it is necessary to inspect these guns, a limited number of them, each year, in order to see how they are standing storage, and so that we may prevent any deterioration as soon as it is detected. The overhaul of machine guns costs considerably more than it does to maintain them either in the hands of troops or in storage, and the first year after a gun is turned in the cost will be considerably higher than it will be the second year. It costs about \$12 for a machine gun, to overhaul it and get it ready for permanent storage.

Senator HITCHCOCK. What do you mean by overhauling, Major?

Major SCHIMELFENIG. It is equivalent to a factory rebuilding. The gun is disassembled, the parts are all gauged, and then rebuilt into a machine gun that is equal in all respects to a new gun.

Senator HITCHCOCK. That is, after it has been in the hands of the Army for some time?

Major SCHIMELFENIG. Yes.

Senator HITCHCOCK. Why is it called in?

Major SCHIMELFENIG. It is called in as a matter of routine; but when the Army is reduced large numbers of guns become surplus in the camps that are abandoned, and we have now about 4,000 machine guns at Camp Jackson, Camp Pike, at Camp Grant, all of which must be shipped to an arsenal and completely overhauled. We feel that the guns that are already in the possession of the Government should be maintained in condition so that they can be immediately issued to organizations that may be raised.

Senator HITCHCOCK. Do you anticipate any greater reduction in the Army this year or for the next succeeding years?

Major SCHIMELFENIG. We based this estimate on doing the work that confronted us at the time the estimate was made, which contemplated no reduction in the Army this year.

General PEIRCE. The reduction has already occurred.

Major SCHIMELFENIG. The reduction occurred last year.

Senator HITCHCOCK. From the reduction that has occurred, and those guns have not received attention yet?

Major SCHIMELFENIG. No, sir; the guns are still at Camps Jackson, Grant, and Pike, and other places. We have not had the funds to transport them to our arsenals.

General PEIRCE. The situation, Senator, was this: Pursuant to the reduction that was made last year a number of organizations were discontinued, and a number of camps were left without any troops at all. Owing to the lack of funds for transportation, all sorts of armament which the troops had at these abandoned camps was stored at those camps, and the troops got out; and that is the condition at the present time. Those stores must be—should be—moved to permanent storage and receive an overhauling before they are put in storage.

Senator HITCHCOCK. The Army is like a church sociable; it costs as much to get out as to get into it.

Senator WADSWORTH. Would this reduction of \$250,000 cripple you? You could do some of this work but not all of it?

FIFTY-CALIBER AIRCRAFT GUNS.

General PEIRCE. We do not feel that we could devote enough of the appropriation to this item I spoke of in the .50-caliber aircraft guns to give them more than about half of what they are calling for.

Senator WADSWORTH. Those airplanes will be finished?

General PEIRCE. Yes, sir; before the guns are finished.

Senator HITCHCOCK. What number are they calling for?

Major SCHIMELFENIG. Two hundred and fifty. We have 40 provided for, plus 75 asked for, and 250 planes have been contracted for, for delivery, and we should have one aircraft gun for each plane. Including the present fiscal year, there are provided for 40, and we are asking in this appropriation for 75. That will be less than half of the aircraft requirements; and on account of the Budget limitations we could not ask for more, and the reduction by the House will still further delay the provision for airplanes, of the .50-caliber

Senator WADSWORTH. Can they carry any smaller than the .50-caliber gun?

Major SCHIMELFENIG. They can; and that is what they will have to do.

Senator WADSWORTH. Of course, you have plenty of the .30-caliber guns?

Major SCHIMELFENIG. We have plenty of the .30 caliber.

Senator WADSWORTH. How much do you think this appropriation ought to be so as not to interfere with the service, regardless of the Budget or the House appropriation?

Major SCHIMELFENIG. We would have liked to have asked for the total number of guns for the Air Service to meet the number of planes appropriated for, or, in addition to what we have asked for, 135 more at \$1,500 apiece.

Senator WADSWORTH. In addition to the \$250,000?

Major SCHIMELFENIG. Yes, sir. You see, the funds heretofore received provided for 40. The requirement is 250. Our requirement was cut by the House to 145. That leaves still a shortage of 135, which if we had had no restrictions made on our estimates would have been included in the estimates.

Senator JONES of Washington. Why do you need 250 at one time? Are not these largely for experimental purposes?

Major SCHIMELFENIG. No, sir; they have passed that stage. These are new planes contracted for by the Air Service of which the .50-caliber gun is the proper arm.

Senator JONES of Washington. You do not anticipate any actual need for them before they are worn out now, do you?

Major SCHIMELFENIG. I do not quite understand you, sir. We have not got them. We have got the .30-caliber gun, which is an inferior weapon.

Senator JONES of Washington. You have 40 of these guns, and you will get about 60 under this appropriation. That makes 110 or 115. For what do you need the 250 now?

Major SCHIMELFENIG. The planes are provided for and contracted for, and there will be lacking those .50-caliber guns.

Senator JONES of Washington. Yes. Well, how will they suffer? Can they not be used as planes?

General PEIRCE. They can be used as planes; yes, sir; but it will be like having a soldier without a rifle.

Senator HITCHCOCK. Can they not practice with the .30-caliber rifles?

General PEIRCE. They can; yes, sir. They will have to make a change in their plane, but they can use the .30-caliber gun, of course.

Senator JONES of Washington. Of course, you would have 115 that could be used for practice with that sized gun.

General PEIRCE. So far as our estimates are concerned for the Air Service, we feel that that is a new field the limits of which have not yet been surveyed. Consequently, the development must be expected to be much more rapid in the air than in the older fields, which have been pretty well delimited, and we feel that we should endeavor to furnish the Air Service with everything that they call for in this development.

Senator JONES of Washington. In other words, this is experimental, is it not, largely?

General PEIRCE. It is not the ultimate expression, of course.

Senator JONES of Washington. No. I was just wondering if you could not accomplish about the same purpose with the 115 that you would with 250. In fact, can you not do just as much good with the 115 in peace as you could with 250?

Major SCHIMELFENIG. The reduction by the House could not all be taken out of other things and given to this 50-caliber gun: so that we can only get 30. We are asking 75, but we can only get 30 out of the money given. We have only 30, not 75, as you see.

Senator JONES of Washington. \$62,000 was allotted?

Major SCHIMELFENIG. Yes, sir.

Senator JONES of Washington. Then you would have 70.

Senator HITCHCOCK. Are these airplanes supposed to be in service and practicing all the time?

Major SCHIMELFENIG. Yes, sir. I can not say that they would be in the hands of troops.

Senator HITCHCOCK. It sounds like a large number. I am in favor of cutting down the number.

Senator WADSWORTH. As the result of the appropriation of last year they had the first planes built since the DH-4 for service. The DH-4 is now 7 years old. This plane far exceeds the DH-4.

Senator JONES of Washington. There will be days when the whole 250 are not flying, and I should think that there would be enough practice done with the smaller number.

Gen. PEIRCE. If you put all the Air Service in one place and put all the machines in one place, they could take turns with them, but they are not so placed.

Senator WADSWORTH. They would have enough machines, but the only difference would be that instead of having 50-caliber guns they would have 30-caliber guns.

General PEIRCE. Our position is in regard to the number of planes, or the use that the Air Service may make of them, that is not within our province. They call on us for the armament for the planes, and we furnish them to the extent that you gentlemen give us the funds.

TANKS.

Senator WADSWORTH. All right; what is the next, General—tanks?

Major QUINTON. The cut that was made by the House under the head of tanks will result in cutting out the manufacture of 6 two-man tanks for service tests.

Senator WADSWORTH. What will be manufactured under the \$300,000?

General PEIRCE. Nothing will be done but development work—pilots' tanks.

Senator WADSWORTH. You expected to make 6 two-man tanks for service?

Major QUINTON. For service tests. When the design has passed the proving-ground tests—that is, the ordnance tests—it is next submitted to a service test, and for a service test enough of the material must be provided to equip at least the smallest unit that uses it. In the case of field artillery, one battery of four guns is an example. That is necessary because not only do they have to test out the practical uses of the arms as well as its satisfactoriness as a machine.

Senator WADSWORTH. Do six tanks make a squadron?

Major QUINTON. A platoon.

Senator HITCHCOCK. Did you have \$450,000 last year for this item?

Major QUINTON. \$450,000; yes, sir.

Senator HITCHCOCK. What does that give us? What have you got on hand?

General PEIRCE. There is no manufacturing done except for development work. The largest item under that \$450,000 was \$250,000 for maintenance of tanks in the hands of the troops.

Senator HITCHCOCK. How many tanks have you?

Major QUINTON. There are of tanks in service, 370 of the 6-ton tanks, and 52 mark-8 tanks; and in storage 15 Ford tanks, 575 6-ton tanks, 42 mark-8 tanks, and 100 French tanks—Renault. There are 945 American-built 6-ton tanks; and about 100 French tanks of the same design.

Senator HITCHCOCK. And still it is proposed to manufacture more?

Senator WADSWORTH. They want six of the experimental type for test. The House reduction would prevent them from getting those tanks.

General PEIRCE. Those few tanks that we have on hand were procured during the war, and the tank is an outright new machine,

of course, and the development has been very rapid and will be rapid; so that the models of tanks that were used during the war are in the way of being obsolete for present use.

Senator HARRIS. How much will be necessary to the development of the six tanks you refer to?

General PEIRCE. The six two-man tanks?

Senator HARRIS. The ones that you say the House appropriation is not sufficient for?

General PEIRCE. \$150,000.

Major QUINTON. It means the elimination of the one item.

General PEIRCE. As I explained before, the reduction by the House would mean the elimination of the manufacture of those two-man tanks.

Senator WADSWORTH. In other words, then, they would cost \$50,000. The estimate was \$350,000, and the House gave them \$300,000?

Major QUINTON. That is right.

Senator JONES of Washington. What is the use, then, if you eliminate the six tanks, for maintenance?

Major QUINTON. There is, in general, \$100,000 for experimental and development work, \$100,000 for maintenance, and \$100,000 for manufacture for service tests of the medium-type tank.

General PEIRCE. Of two medium-type tanks.

Senator JONES of Washington. Do you consider the medium-type tank tests as more important than the two-man tanks?

Major QUINTON. Yes; that is the more important item. Progress is much more advanced on that than on the other type.

Senator HITCHCOCK. What are they keeping these 945 tanks for, if they are becoming obsolete so rapidly?

General PEIRCE. For training purposes. The Tank Corps are using them right along for drill and training.

Senator WADSWORTH. That is all we have got in the Army, is it not?

General PEIRCE. Yes. If trouble should come, that is what we would have to use at present.

Senator WADSWORTH. You have not issued to troops any of the newer types?

General PEIRCE. No; we have not got any.

Senator WADSWORTH. You have just designed a few, and expect to make a few for tests?

General PEIRCE. Yes.

Senator HITCHCOCK. I think the major testified that a large proportion of these tanks were in storage.

Major QUINTON. Yes, sir.

Senator HITCHCOCK. What proportion?

General PEIRCE. Four hundred and twenty-two are in the hands of troops, and there are about 730 in storage.

Senator HARRIS. You say that you spent \$200,000 last year for those in the hands of troops, for repairs and upkeep of those?

Major SCHIMELFENIG. That included about \$100,000 for overhauling tanks before they were placed in service—overhauling and rebuilding, and—

Senator WADSWORTH. You figure that this year \$100,000 is enough to keep in repair the tanks that are in use?

Major SCHIMELFENIG. Yes, sir; that work will be finished June 30 of this year, of overhauling.

Senator HITCHCOCK. That is not maintenance, but overhauling?

Major SCHIMELFENIG. No, sir; overhauling.

Senator WADSWORTH. Where is this work done?

Major SCHIMELFENIG. We do most of this at Camp Meade.

Senator WADSWORTH. That is at the tank school?

Major SCHIMELFENIG. Yes; the tank school. We have an ordnance company stationed there.

Senator WADSWORTH. I have seen it.

The next item is "Field Artillery armament."

FIELD ARTILLERY ARMAMENT.

General PEIRCE. Field Artillery—that appropriation is entirely for development work, and the reduction made by the House will simply slow up the program and we will not be able to do as much as we wanted to do and thought it was advisable to do. I can give you the details of what it was proposed to do.

Senator WADSWORTH. Is the development work scattered through all the different calibers?

General PEIRCE. Yes; through all of the calibers.

Senator WADSWORTH. Or limited to certain calibers in particular?

General PEIRCE. I want to push through to completion the 75's and the 105 howitzers which are the divisional equipment. We wish to complete and absolutely put away the divisional equipment, because that is the equipment which will be needed in the largest quantity and the first needed. Next we want to take up the corps equipment and finally the Army and the anti-aircraft.

Senator HITCHCOCK. You say that is development work. I assume that means the manufacture of a few of a certain type?

General PEIRCE. Yes, sir; they are designed first, then manufactured—gun and carriage—and then it is tested at the proving ground, and if successful in that, then ultimately the manufacture of a small number for test by troops before it passes into the stage of an accepted and approved design.

Senator WADSWORTH. How about the next one, General?

General PEIRCE. The same.

Senator WADSWORTH. Development of ammunition?

General PEIRCE. The same remarks are applicable to the next three appropriations except that of maintenance, which enters both the ammunition and the mobile artillery items; in other words, in addition to development work in ammunition there will be maintenance work.

Senator HITCHCOCK. Maintenance of what?

General PEIRCE. Of the matériel itself, and its guns, and carriages, and ammunition.

Senator HITCHCOCK. You mean of those experimental guns, carriages, etc.?

General PEIRCE. No; that is ammunition in store and guns and carriages in the hands of troops.

Senator HITCHCOCK. What does that maintenance amount to; how does that compare—one is really necessary and the other is optional, I suppose.

General PEIRCE. Maintenance is the large part. Major Jenks will tell you about that.

STATEMENT OF MAJ. GLEN F. JENKS.

PURCHASE, MANUFACTURE, AND TEST OF AMMUNITION FOR MOUNTAIN FIELD CANNON.

Major JENKS. We have for maintenance of ammunition \$110,000, for the maintenance and surveillance of ammunition. That includes both the ammunition in the hands of troops and in storage in the ordnance establishment.

Senator WADSWORTH. Now, you are speaking of the items between lines 16 and 20, inclusive?

General PEIRCE. Yes, sir.

Major JENKS. That is the maintenance feature, part only, of what we have in there, that on field artillery ammunition; we have the development of field artillery ammunition and the maintenance of ammunition.

Senator WADSWORTH. How much had you expected to spend on development?

Major JENKS. That has been reduced from \$250,000 to \$154,000.

Senator WADSWORTH. Under the House bill?

Major JENKS. Yes, sir.

Senator WADSWORTH. \$154,000 for development?

Major JENKS. Yes, sir.

Senator WADSWORTH. Out of the \$400,000 asked for?

Major JENKS. Yes, sir.

Senator WADSWORTH. Is the rest for maintenance?

Major JENKS. No, sir; there is another item of \$121,000 for service testing of new types of ammunition and the new type of artillery matériel to be developed; the new types of artillery will have to be service tested, and we will have to have ammunition provided for that purpose, and that may be either the new types of ammunition or ammunition already on hand, dependent upon the state of development of ammunition of that particular kind.

Senator WADSWORTH. Is the rest for maintenance?

Major JENKS. Yes, sir.

Senator WADSWORTH. Now, which is the most important; upon which do you place the greatest emphasis in your protest, as I take, against the reduction made by the House?

Major JENKS. We have accepted the cut made by the House in the development and service testing about equally divided and letting the surveillance and maintenance stand, because we have to maintain what we have, and we split the cut between the other two items.

Senator HITCHCOCK. Is this manufacturing for development purposes?

Major JENKS. Yes, sir.

Senator HITCHCOCK. Or is that for ammunition entirely?

Major JENKS. All of the manufacturing is either for development of new types of ammunition or the production of ammunition for service test; it is the second step in the development.

Senator HITCHCOCK. Why do you need this ammunition?

Major JENKS. This is not to augment our stocks; no, sir.

Senator HITCHCOCK. We have great quantities of ammunition on hand.

General PEIRCE. This is all for experimental purposes.

Senator WADSWORTH. But of the old ammunition, the ammunition on hand, no great quantities can be used in these new types of guns. They have to have their own ammunition eventually, do they not?

Major JENKS. Yes, sir.

General PEIRCE. Yes, sir.

Senator WADSWORTH. And you are experimenting with them?

Major JENKS. Yes, sir.

Senator HARRIS. Where is this money going to be spent—what arsenal?

General PEIRCE. How is that?

Senator HARRIS. At what arsenal is this money going to be spent?

Major JENKS. The development money is already spent at the Piccatinny Arsenal; the manufacturing for service test will probably all be done at the Piccatinny Arsenal; the money for the maintenance of ammunition is spent wherever the ammunition is located.

Senator HARRIS. What is the name of that arsenal?

Major JENKS. Piccatinny Arsenal.

Senator HARRIS. Where is that?

Senator WADSWORTH. New Jersey.

Major JENKS. New Jersey.

General PEIRCE. New Jersey.

Senator WADSWORTH. Now, pass to the next item.

General PEIRCE. The item for alteration and maintenance of the mobile artillery. This is practically a maintenance operation.

Senator WADSWORTH. Your estimate of \$525,000 they have reduced to \$400,000. Will you be able to keep the artillery on hand in the hands of troops and in storage in repair; will that \$400,000 keep it in repair?

Major SCHIMELFENIG. I do not think we can do it, sir. We had for 1916 an appropriation of \$205,000 to maintain equipment worth \$11,270,000. We estimated for \$525,000 this year to maintain equipment worth \$372,000,000; or, in other words, for two and one-half times the appropriation we propose to maintain thirty-three times the amount of material.

Senator WADSWORTH. Of course, a larger percentage of the matériel in 1916 was in the hands of the troops than it is to-day?

Major SCHIMELFENIG. Yes, sir; there is at least as much to-day in the hands of the troops as there was in 1916.

Senator WADSWORTH. Probably more.

Major SCHIMELFENIG. Probably more; yes, sir. There are three requirements we have for maintenance: Maintenance in the hands of troops, for spare parts, and for maintenance and storage. We propose to do practically no overhauling in 1923.

Senator WADSWORTH. Do you think the condition of our field artillery stock will go downhill with an appropriation of \$40,000?

Major SCHIMELFENIG. Yes, sir.

Senator WADSWORTH. You feel certain of that, do you, General Peirce?

General PEIRCE. I can not say I feel certain. I think these estimates are only estimates, but they represent the best judgment we can get. I think from past experience the full amount asked for is needed to prevent harmful deterioration.

Senator HITCHCOCK. What happens to it that makes it deteriorate? General PEIRCE. Well, it is like any machine; it is like an automobile that is not repaired; in time it gets worse if it is in use; and if the machine is in storage, or put in storage without being in condition it deteriorates very much more rapidly than it otherwise would.

Senator WADSWORTH. Of course, the troops are using guns in target practice and maneuvers?

General PEIRCE. Troop are using guns; and if they are not repaired when they should be, the wear and tear is accelerated.

Senator HITCHCOCK. What happens when it deteriorates? Is the deterioration in the gun carriages?

General PEIRCE. It is mainly in the carriages.

Senator HITCHCOCK. I suppose the gun itself does not suffer much?

General PEIRCE. Excepting the minor parts of the breech mechanism or sights, but it is mainly in the carriage.

Senator HITCHCOCK. What is this item of maintenance: how large is that?

Major SCHIMELFENIG. Maintenance in the hands of troops within the continental limits of the United States, \$136,000.

Senator WADSWORTH. Is that on the basis of \$400,000?

Major SCHIMELFENIG. No; that is on the basis of \$525,000. On the basis of \$400,000 that will be reduced to \$100,000.

Senator WADSWORTH. Well, the rest is for maintenance of the material that is in storage, is it?

Major SCHIMELFENIG. No; there is a requirement of \$151,800 for spare parts for all calibers of artillery, for tractors, and for fire-control equipment. Then there is a requirement of \$220,000 for maintenance of the matériel in storage.

Senator HITCHCOCK. Two hundred and what?

Major SCHIMELFENIG. \$225,000.

GUNS AND STORAGE.

Senator WADSWORTH. How many guns does this apply to: about 7,000?

General PEIRCE. Somewheres around 7,000.

Senator WADSWORTH. Of all calibers?

General PEIRCE. Probably around 7,000.

Senator WADSWORTH. Of all calibers?

General PEIRCE. Everything; mainly 75's and 155's.

Senator WADSWORTH. And the 4.7?

General PEIRCE. And the 4.7; not very many of those.

Major SCHIMELFENIG. Do you care to have the figures on those?

Senator WADSWORTH. Yes; I think it would be well to have that.

Major SCHIMELFENIG. The number in storage?

Senator WADSWORTH. Just give us the number of guns which are in storage or with troops.

Major SCHIMELFENIG. I have it.

Senator WADSWORTH. Did you have that statement?

Major SCHIMELFENIG. I have that statement; yes, sir.

Senator WADSWORTH. All right.

Major SCHIMELFENIG. There are one thousand three hundred and twenty-four 7-millimeter guns, five hundred and thirty 3-inch guns, four thousand eight hundred 75-millimeter guns, two thousand six hundred and fifty-two 155-millimeter howitzers, four hundred and twenty-six 4.7's, eight hundred and fifty-one 155-millimeter guns.

three hundred and eighty-one 8-inch howitzers, three hundred and twenty-seven 240-millimeter howitzers; one hundred and fifty-six 60-pounder guns; one hundred and twenty-two 105-millimeter howitzers, German; one hundred 6-inch guns, nine hundred and sixty-five 3-inch Stokes mortars; four hundred and fifty-nine 6-inch French mortars; eighteen 7-inch navy guns on caterpillar mounts, one thousand nine hundred 5-ton tractors, and one thousand three hundred 10-ton tractors.

Senator WADSWORTH. In storage?

Major SCHIMELFENIG. These are all in storage.

Senator HITCHCOCK. Have you the total there?

Major SCHIMELFENIG. No, sir; I have not. I have the total money value.

Senator HITCHCOCK. Well, what is the total money value?

Major SCHIMELFENIG. The money value includes the limbers, caissons, and pertaining to vehicles; it amounts to \$311,619,724.

Senator JONES. What do you have to do to maintain those in storage?

Major SCHIMELFENIG. In the case of motor vehicles and tractors and repairs to trucks it is necessary to turn the motor over at least twice a year.

Senator JONES. What I have in mind are the guns.

Major SCHIMELFENIG. It is necessary to examine the recuperators to prevent leakage of the oil, because when the oil leaks out the recuperators will rust on the inside; it is necessary to examine the axles and wheels; and then a certain number, not over 10 per cent, are disassembled each year for a thorough examination; that will mean every gun and carriage is thoroughly examined once every 10 years.

Senator WADSWORTH. That is a precaution, I suppose?

Major SCHIMELFENIG. As a precaution; yes, sir; to have the material ready for prompt issue.

Senator WADSWORTH. Now, guns with troops.

Senator HITCHCOCK. Let me ask you one further question there about this mobile artillery. That means we have got \$311,000,000 worth of mobile artillery stores, not in use, but just stored?

General PEIRCE. That includes the caissons and trucks, quite a number of tractors.

Senator HITCHCOCK. Well, of course.

Major SCHIMELFENIG. Guns in the hands of the Regular Army: One hundred and ninety-six 75-millimeter guns and carriages.

General PEIRCE. I think that the number of guns in the hands of troops is all given in the House hearings.

Major SCHIMELFENIG. In the hands of the Regular Army: 75-millimeter guns, 256; 2.95 mountain guns, 48; 155-millimeter howitzers, 72; 155-millimeter guns, 128; 8-inch howitzers, 16; 240-millimeter howitzers, 12.

Senator WADSWORTH. Those are railroad mounts, are they not?

Major SCHIMELFENIG. No; they are mobile mounts.

Senator WADSWORTH. Two hundred and forty?

Major SCHIMELFENIG. Yes, sir; they are trailer mounts carried on four vehicles.

Senator WADSWORTH. Is that all in the hands of the Regular Army?

Major SCHIMELFENIG. That is in the hands of the Regular Army.
Senator WADSWORTH. Now, about the National Guard.

Major SCHIMELFENIG. The National Guard matériel is not maintained from this appropriation, but I can give you the figures: 75-millimeter guns, 584; 155-millimeter howitzers, 140; 155-millimeter guns, 52.

Senator WADSWORTH. You have not mentioned any railroad guns, have you?

Major SCHIMELFENIG. No, sir; that is maintained under the same appropriation; that applies—

General PEIRCE. That is just mobile artillery.

Major SCHIMELFENIG. To seacoast artillery.

Senator WADSWORTH. Well, ordnance people do it, do they not?

Major SCHIMELFENIG. Sir?

General PEIRCE. Yes.

Senator WADSWORTH. The ordnance people do it, do they not?

Major SCHIMELFENIG. Yes, sir.

Senator HITCHCOCK. Did you give your total of those in the hands of the Army?

Major SCHIMELFENIG. Yes, sir; the total is 532; and in the hands of the National Guard 776.

Senator WADSWORTH. Let us go to the next item: "For purchase, manufacture, and test of ammunition, subcaliber guns, and other accessories, for mountain, field, and seas artillery practice, including the machinery necessary for their manufacture."

That is the same as the Budget?

Major MAXWELL. Yes, sir; this was not cut.

Senator WADSWORTH. All right; then we will not discuss it.

General PEIRCE. The next is proving grounds, Army.

Senator HITCHCOCK. Did you spend all the money that was appropriated last year, \$145,000?

Major MAXWELL. Yes, sir; that is being spent on target practice and materials.

Senator WADSWORTH. The next item is proving grounds. Is this the Aberdeen work?

General PEIRCE. Yes, sir.

PROVING GROUNDS, ARMY.

STATEMENT OF COL. J. W. JOYES.

Senator WADSWORTH. Proceed, General.

General PEIRCE. This is an appropriation for the general operation of the proving grounds. It does not, however, necessarily defray all the expense of tests, such expenses as are special for a test—that is, when a particular construction is required—are defrayed out of the manufacturing appropriations covering the manufacture of the gun and carriage to be tested; but this is for the general expenses of the proving ground.

Senator WADSWORTH. Your estimate was \$250,000 and the House reduced it to \$200,000. What effect will that have?

Colonel JOYES. The effect of the cut is that it will necessitate the greatest parsimony in all expenses of operations and considerably

restrict the usefulness of the proving ground. It will be met, but with great difficulty. If it were a matter of having that appropriation only, the proving ground barely would be kept up in position for work without accomplishing much. In other words, the fixed, unavoidable overheads have gotten down there to an irreducible minimum if you are going to have a proving ground at all, and would mean that with a certain volume of work, such as we may expect to have next year, we will just be able to function.

Senator HITCHCOCK. How many persons are employed there?

Colonel JOYES. Well, it varies. At the present time in the neighborhood of five or six hundred, I think, sir—580 on January 1, and we have come down below that since then. It fluctuates up and down.

Senator HITCHCOCK. These expenses do not include the pay of the regular officers of the Army there, do they?

Colonel JOYES. No, sir.

Senator HITCHCOCK. What do they include?

Colonel JOYES. Sir?

Senator HITCHCOCK. What do they include?

Colonel JOYES. What expenditures?

CIVILIAN EMPLOYEES.

Senator HITCHCOCK. Yes.

Colonel JOYES. They include the pay of all the civilian employees.

Senator HITCHCOCK. Are there 500 of those?

Colonel JOYES. Yes.

Senator HITCHCOCK. Are there 500 civilian employees?

Colonel JOYES. Yes, sir; between five and six hundred, fluctuating different months.

Senator HITCHCOCK. What do they do?

Colonel JOYES. They do a variety of things. The personnel in the office, clerks, computers, engineers—there are many men who are employed in keeping up the instrument equipment of the proving ground, for measuring ballistics, measuring pressures, and such observations.

Senator HITCHCOCK. Is not that work done by officers?

Colonel JOYES. Sir?

Senator HITCHCOCK. Do not officers do the work of computing and like engineering work?

Colonel JOYES. Officers do some work of computing; yes, sir; but there is a special force of computers up there who are doing some very large-scale computing, such as for making up the range tables, ballistic tables, and that sort of thing.

Senator HITCHCOCK. However, officers are educated in ballistics, are they not?

Colonel JOYES. But you do not have enough officers, and we do not figure that it is economy to have them put their time—educated men capable of doing other things—sitting down working on logarithm tables all day long.

Senator HITCHCOCK. How many officers are there there?

Colonel JOYES. There are in the neighborhood of between 45 and 50 officers all told there, generally speaking. That includes a good many branches. There are some Air Service officers; there is one organization of heavier than air, and one of lighter than air, for going aloft and dropping bombs for experimental purposes and for experiments

in bomb ballistics, etc. Then there are a couple of medical officers: a number of scattering services like that, and about 20 to 25 ordnance officers.

Senator HITCHCOCK. And how many privates, noncommissioned officers?

Colonel JOYES. Fluctuating; in the neighborhood of a hundred, sir; slightly over that at the present time.

Senator WADSWORTH. That includes the personnel of the Air Service?

Colonel JOYES. Sir?

Senator WADSWORTH. That includes the personnel of the Air Service?

Colonel JOYES. I think that is all ordnance, sir.

Senator WADSWORTH. Sir?

Colonel JOYES. As I remember, it is all ordnance. I will tell you in just a moment.

General PEIRCE. I may say that if the reduction in the Army personnel contemplated by the House obtains it will result in there being no enlisted ordnance personnel at Aberdeen or any of the manufacturing arsenals: they will have to be withdrawn in order to maintain the maintenance companies with troops, and the work that those men are now doing will have to be done by civilians.

Senator HITCHCOCK. How many rounds are fired a month there?

General PEIRCE. In regard to the enlisted men on January 16 there was 106, all ordnance; there are quite a number of air men also.

Senator HITCHCOCK. How many rounds are fired a day?

Colonel JOYES. That is quite variable. During the past fiscal year ended June 30, 1921, we counted 31,231 rounds.

Senator HITCHCOCK. Thirty-one thousand rounds for the year?

Colonel JOYES. Thirty-one thousand two hundred and thirty-one rounds in the year. That does not include small-arms firing and a number of miscellaneous rounds like that, but straight artillery rounds, and there was in addition to that about 6,000 bombs dropped. The small-arms firing ran up in the neighborhood of 326,000 rounds, and there were in addition, as a measure of the magnitude of the work, about 40,000 miles of vehicles under test—tanks, tractors, trailers, artillery vehicles, and so on, on road test. You see we have to try them out for their ability to keep the road as well as to fire.

That gives you a fair idea of the magnitude of the work of the proving ground aside from some other things that can not be measured that way.

Senator HITCHCOCK. During the war how many rounds a day were fired, at the maximum?

Colonel JOYES. I have not brought any figures as to that with me, sir, I am sorry to say. I prefer to give you that reliably and put it in the record; but it ran very high—I should say it ran into tens of thousands per day.

Senator HITCHCOCK. About 10,000 a day, I think it was, when I was there.

Colonel JOYES. I would be glad to correct that in the record, so as not to speak inaccurately and have it go in the record that way.

Senator HITCHCOCK. How many acres have you at Aberdeen?

Colonel JOYES. What is that?

Senator HITCHCOCK. How many acres have you at Aberdeen?

Colonel JOYES. Approximately 35,000.

Major QUINTON. Half of it is under water.

Senator SPENCER. Yes; half of it is under water.

Colonel JOYES. Yes.

Senator HITCHCOCK. Do you remember how many civilian employees there were at the maximum during the war period, Colonel?

Colonel JOYES. No; but I can get it for you. They had a fixed organization there during the war; they had a considerable number of military men in military status, officers and men; there was a large garrison. In addition, they employed a number of civilians on the actual proving work, and all the time there was construction work going on with some considerable Government forces, civilian and contractors' forces. I will have that put in the record, if you wish.

Senator HITCHCOCK. Does the appropriation of this item pay those civilian employees?

Colonel JOYES. Beg pardon?

Senator HITCHCOCK. Does this appropriation that we have before us now include the pay of the civilian employees?

Colonel JOYES. So far as it goes.

Senator HITCHCOCK. What?

Colonel JOYES. As we were telling you, sir, this \$200,000 would not do any considerable amount of useful proving work in addition to the upkeep and administration of the proving ground. It is expected that some funds must be drawn from the appropriations made for manufacture of certain articles covering their test. For instance, all our appropriations for material always say "for the purchase, or manufacture and test," so that it is thoroughly understood that the test of specific things is very largely covered out of all appropriations for the procurement of them. To a certain extent the appropriation "Proving ground, Army," carries a number of little incidental tests that are not worth while to set up a special account for.

Senator HITCHCOCK. Then, Colonel, am I right here in the figures that during last year you fired about as many rounds as they fired in three days during the war?

Colonel JOYES. Something to that effect, sir.

Senator HITCHCOCK. Well, now, of these 500 civilian employees, how many of them may be called clerical?

Colonel JOYES. Sir; clerical?

Senator HITCHCOCK. Well, I mean indoors.

Colonel JOYES. Very roughly speaking, probably something like 10 to 15 per cent.

Senator HITCHCOCK. What are the others doing?

Colonel JOYES. Sir?

Senator HITCHCOCK. What sort of work are the other 450 doing?

Colonel JOYES. As I mentioned awhile ago, there are some doing engineering, technical work, and others who are out on the proving grounds who are actually handling the guns, shooting them—that is, loading them and then going out and hunting up the projectiles, as we have to do sometimes to find why they have not functioned correctly—and there have to be a number of observers to observe the fall of shot, partly for safety alone and partly to see where the shot goes so as to determine what you are trying to find out from ranges, and so on.

Senator HITCHCOCK. You are having civilians do that work?

Colonel JOYES. Some part of it, sir, because we have not enough of any other kind of employees.

Others are employed in equipment and power plant, machine shops, transportation, and service functions.

You see it is an isolated post and it is necessary to have certain utilities; you must have a power plant to give heat and some power; you must provide for water supply and sewer service, and electric lights; you must have the place well guarded, and there, of course, in some of these things we use such soldiers as we have for the utmost economy.

General PEIRCE. There are a number of duties there which could probably properly be performed by soldiers, or enlisted men if we had them, for instance, the work of firing the guns, guard duty, or police duty; those things could be done appropriately by soldiers if we had them; but we do not have them and, of course, have to hire civilians.

Senator HITCHCOCK. That means they are hiring civilians to fire the guns there, and do other work that should all be done by military men.

Colonel JOYES. And these other things. Since the war at the Sandy Hook Proving Ground we have been using civilians because it was impossible to get the enlisted personnel in sufficient quantity and of proper quality under conditions where we could use them with anything like efficiency when you consider, for instance, the educational and recreational requirements take a great deal of time from the men, and the period of enlistment is so short that when a man becomes accustomed to his duties and can work with any kind of efficiency at all his period of enlistment expires. There are a great many things that are not as they were in the old days. In the old days we would have gotten out of our detachment of enlisted men the men to do much of this work that we had to hire civilians for. There is no escape from it; you can not start in a period of work and have everything arranged in a certain amount or extent of it and then have men work part of the time.

Senator HITCHCOCK. General, this proving ground is used only to test your new types of guns and bombs and howitzers, and so on is it not?

General PEIRCE. It is used for that and for any experiments connected with the firing of guns, tests of powders, tests of projectiles, obtaining the data required for range tables for guns in use in experimental work of that sort.

Senator WADSWORTH. And the test of vehicles?

General PEIRCE. And the test of vehicles.

Senator HITCHCOCK. Could you take this bill and give us an idea of the amount that is expended for experimental work?

General PEIRCE. I have that data, sir, and would be very glad to furnish it for the record.

Senator HITCHCOCK. I do not see it in the record, but I am amazed at what it aggregates; will you kindly put it in the record, General?

General PEIRCE. Yes; I can do that.

I would like to say that the sum total of our estimates is but very slightly over the pre-war average of about five years, and that if

you consider the great increase in the number of ordnance establishments, the great increase in the amount of property, and the great increase in the fields of ordnance activity resulting from the war, the number of new mechanical devices required for warfare now that were developed during the war and as a result of the war, that the amounts that we are asking for for development work, I think, will seem very small. Our estimates totaled \$9,059,417.

Of that, for experimental and development work there is \$1,315,697 for production for service test, \$715,000 for maintenance, \$1,340,200, and so on. We have quite an analysis of the estimates here.

Senator HITCHCOCK. Does the maintenance apply mainly to experimental work?

General PEIRCE. Sir?

Senator HITCHCOCK. Does the maintenance apply only to experimental work?

General PEIRCE. No; the maintenance is on articles in the hands of troops or in storage. The first item.

Now, Mr. Chairman, before we close, there is one item to which I want to call especial attention, and that is the Rock Island Bridge.

ROCK ISLAND BRIDGE, ROCK ISLAND, ILL.

The estimate for the Rock Island Bridge and viaduct, \$30,000, was passed by the House with no cut, but there is an item following that for the repair of the piers of the Rock Island Bridge, \$141,000, which the House struck out entirely; and I wish to present it to the committee with all the force that I can, because I think that it is a very essential item.

This bridge connects the island of Rock Island with the Iowa shore—the city of Davenport. It is a double-deck bridge. On the lower deck is a wagon road and street car tracks, and on the upper deck there is the railroad, the main line of the Rock Island Railroad.

The stone piers upon which this bridge rests have become worn away by the action of the water and ice below the normal water line; and an examination made at low water during the past year has revealed what the engineers state to be an unsafe condition of this bridge.

Senator SPENCER. Does the railroad use it?

General PEIRCE. Yes; and this estimate has been put in for the purpose of repairing and making secure those piers. Under the original statute authorizing the bridge the railroad company is obligated to pay half the cost of operation and upkeep of the bridge.

Senator HITCHCOCK. Is the bridge used only for Government service?

General PEIRCE. No, sir; the Government uses and the railroad uses it.

Senator HITCHCOCK. That is their principal line, is it?

General PEIRCE. The main line of the Rock Island Railroad.

Senator HITCHCOCK. I thought it was a branch.

General PEIRCE. No; it is the main line. Now, while it is estimated the cost of repairing these piers will be \$141,000, and an appropriation of that amount must be made if the work is to be done,

the Rock Island Railroad Co. will refund half of that to the Treasury, so the net cost to the United States will only be one-half of that.

Senator HITCHCOCK. Is the railroad company ready to do it, or are they compelled to?

General PEIRCE. We have a contract with them under the original statute which obligates them to pay annually half the cost of maintenance and upkeep of the bridge. There is no question about their willingness and their obligation to pay one-half of this.

Senator WADSWORTH. I think we better suspend our hearing for the afternoon. We will ask you to return to-morrow at 2.15.

(Thereupon at 5.10 p. m. an adjournment was taken until 2.15 o'clock p. m. Friday, April 7, 1922.)

WAR DEPARTMENT APPROPRIATION BILL, 1923.

FRIDAY, APRIL 7, 1922.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met, pursuant to adjournment, at 2.15 o'clock p. m., Senator James W. Wadsworth (chairman) presiding.

Present: Senators Wadsworth (chairman), Warren, Jones of Washington, Lenroot, Spencer, Hitchcock, and Harris.

ORDNANCE DEPARTMENT.

STATEMENTS OF MAJ. GEN. CLARENCE C. WILLIAMS, CHIEF OF ORDNANCE; ACCOMPANIED BY BRIG. GEN. WILLIAM S. PEIRCE, ASSISTANT CHIEF OF ORDNANCE; MAJ. CHARLES T. HARRIS; MAJ. GLENN F. JENKS; AND MAJ. R. L. MAXWELL.

ROCK ISLAND BRIDGE, ROCK ISLAND, ILL.

Senator WADSWORTH. Our last topic was concerning Rock Island bridge, Rock Island, Ill. General Williams, do you care to take up the next item, "Testing machines"?

General WILLIAMS. Yes, sir. We have asked there for \$35,000, and \$26,250 has been allowed. That is our main laboratory.

Senator HARRIS. Mr. Chairman, I had to leave and was not here yesterday afternoon, and did not hear what was said on the subject of the Rock Island bridge. Would you object to having the General state that briefly?

Senator WADSWORTH. What about that, General?

REPAIR OF ROCK ISLAND ARSENAL BRIDGE PIERS.

General WILLIAMS. The piers are being eroded by the action of the ice, and we have had them examined by expert engineers, and they all agree that we should repair the bridge as soon as possible, and this item is put in for the estimated cost of those repairs.

Senator SPENCER. There can not be anything actually dangerous, if the railroad is still using the bridge.

General WILLIAMS. At the present moment I should not say that it is dangerous; but if allowed to continue, it will become dangerous, and this is a precautionary measure. The repairs should be made.

Senator WADSWORTH. It was stated yesterday, Senator Harris, that of this sum one-half would have to be paid by the railroad company.

Senator HARRIS. How much is that?

Senator WADSWORTH. \$141,000. You will find it on the side slip pasted on that page.

Senator HARRIS. The Government would have to pay one-half of that. Do you think you would run any risk by waiting a year on that?

General WILLIAMS. The engineers who were employed to examine the bridge were of the opinion that the repairs should be made and be made as soon as possible. I do not imagine for a minute that that bridge is going to fall down in the next year if those repairs are not made; but it is like every other thing, if the repairs are made in sufficient time it will save you a good deal.

Senator HARRIS. You think it would be a saving, do you, to do it now?

General WILLIAMS. Yes, sir; I think it should be done now.

Senator HARRIS. Have the railroad engineers said anything about it?

Major JENKS. Yes, sir; they have examined the bridge and agreed that it should be done at once.

Senator HARRIS. Could you put that letter from the railroad engineers into the record?

General WILLIAMS. I will furnish the letter later, as I will have to get it from Rock Island Arsenal. There is a photograph of one of the piers, and you can see how the stone is eroded and broken [handing photograph to Senator Harris].

Senator WADSWORTH. Did you have some more questions that you were going to ask?

Senator HARRIS. No; that is all.

General WILLIAMS. Here is a statement of the condition of the piers that I would like to put into the record.

Senator WADSWORTH. Very well; that will go into the record.

(The statement referred to is here printed in the record, as follows:)

MEMORANDUM.

WAR DEPARTMENT.

OFFICE OF THE CHIEF OF ORDNANCE.

Washington, April 7, 1922.

The following is extracted from the report from the district engineer's office, Rock Island, Ill., regarding the condition of the Rock Island bridge:

Pier No. 1. Inspected July 27, 1921; south side of pier in bad condition.

Pier No. 4. Pier in very bad condition.

If Piers Nos. 1, 4, and 5 are allowed to deteriorate but a little more they will be subject to condemnation. Pier No. 3 is almost at that point now, and vibration is causing them to deteriorate at a fast rate. It will be but a short time when these three piers will start to settle on the west end, causing an uneven stress on the spans, which will endanger both substructure and superstructure. There should be some action taken to remedy the present condition at the earliest possible date.

Pier No. 5. Lower or circular end of pier in very bad condition. Find longitudinal walls around entire end from bottom up to the sixth course of stone, stone badly cracked and shattered, and the stone is gone from a depth of from 6 to 8 and 10 inches into pier. Find the vibration on this pier has caused a number of pieces of stone to shake loose and fall out. All of the piers show a worse condition on the west end of the piers than last year.

Mr. Monroe has made certain calculations as to the stability of the piers. Under certain conditions of loading he has ascertained that the resultant of the forces produced by the thrust of the train, the pressure of ice and current, wind and the weight of the pier and superstructure falls almost at the edge of the pier. He has also ascertained that under other conditions of loading

the masonry will be subjected to a stress of 79.5 tons per square foot, a dangerous stress for other first-class masonry.

The Chief of Engineers, commenting upon the report of the district engineer, states: "It seems clear that the piers are apt to be approaching an unsafe condition and that repairs are necessary and urgent."

TESTING MACHINES.

General WILLIAMS. The next subject is "Testing machines." The testing machine is a part of the equipment of the laboratory at Watertown Arsenal. This laboratory is very important for us, in that it is really our metallurgical laboratory where the studies of steel and iron and other metals are made. This year it is even more important to us than it has been before, because several big gun forging makers have gone out of business, and this is the only place where the art of making gun forgings is being kept alive.

Senator WADSWORTH. What will be the effect of the reduction of the estimate?

General WILLIAMS. It would limit the work that the laboratory can do; and we probably will have to cut out some of the other things that we are investigating.

Senator WADSWORTH. I see you have \$50,000 this year.

General WILLIAMS. Yes.

Senator WADSWORTH. Has that all been obligated?

General WILLIAMS. That will be all spent. It is practically all obligated now, and we will just about run the laboratory for the rest of the year.

Senator WADSWORTH. Do you pay employees out of this appropriation?

General WILLIAMS. Yes; we pay some of them out of that appropriation.

Senator LENROOT. I see by the House testimony where the Secretary of War withheld \$5,000 of this year's appropriation.

General WILLIAMS. That was held as a part of the Secretary of War's reserve; and we of course did not have that to obligate.

Senator HARRIS. You asked \$35,000?

General WILLIAMS. Yes.

Senator HARRIS. And the budget approved that?

General WILLIAMS. Yes.

Senator WADSWORTH. Are there any other questions that you would like to ask the general on that? That would not be a very serious matter if that cut was made? You would simply have to forego certain work?

General WILLIAMS. It would mean that we would have to give up certain of the experimental work that we have going on there. I would not say it is a vital thing; no, sir.

REPAIRS OF ARSENALS.

Senator WADSWORTH. How about the next item, "Repairs of arsenals?"

General WILLIAMS. Repairs of arsenals is one of the very most important appropriation items that we have. It is our general fund for the repair and upkeep of buildings, machines, and so forth, at all of the arsenals, and we absolutely need that. It is necessary for us to have that much. The House gave us what we asked for, I believe.

CIVILIAN SCHOOLS, ORDNANCE RESERVATIONS.

Senator WADSWORTH. The next item is "Civilian schools, ordnance reservations." The House gave you the estimate there?

General WILLIAMS. Yes, sir. There is one thing about the item of civilian schools on ordnance reservations; we have proposed a change in the wording. The wording as it stands now is as follows: "For the maintenance and operation of schools for children on ordnance reservations."

We proposed that it be changed to read, "To provide for the schooling of children residing on ordnance reservations, including the necessary maintenance of schools," the reason for this change being that in some places we do not have a school on the post and it is necessary for them to use the near-by schools, in which cases, inasmuch as no taxes are paid by the parents of these children, the local school authorities sometimes demand tuition fees. The object of that is to cover that particular thing.

Senator WADSWORTH. Do you happen to remember, General, whether there are appropriations for a similar purpose under other branches of the Army?

General WILLIAMS. I do not know, Senator, about that; I think that there are.

Senator WADSWORTH. The same condition must exist in other branches of the service. It is curious that this should be a little appropriation tucked off here by itself. One would think we would have one appropriation of this kind to cover the entire Army.

Senator HITCHCOCK. There is no more reason why the Ordnance Department should have a school than why other branches of the service should have it.

Senator WADSWORTH. No.

Senator HITCHCOCK. I think there are some others.

Senator WADSWORTH. I do not remember it in the Army appropriation bill. It probably was in the legislative, executive, and judicial appropriation bill.

General WILLIAMS. I do not recall it.

Senator WADSWORTH. Or possibly in the sundry civil bill.

Senator HARRIS. Have you been getting this appropriation for some time?

General WILLIAMS. Yes; it has been running about three years.

Senator HITCHCOCK. That is to educate the children there rather than to have them go into the city and pay tuition?

General WILLIAMS. We generally run a post school, but sometimes we do not run a post school, and then the children living on the Government reservation have to attend the neighborhood school, and in such case they sometimes have to pay tuition.

Senator HITCHCOCK. I was wondering whether it would not be cheaper to have the Government pay the children's tuition at the schools instead of having the Government maintain schools on the reservations.

Senator SPENCER. That is what you want; you want the authority that would enable you to pay tuition if you want to?

Major BROWNE. May I say in response to that inquiry of a moment ago, Mr. Chairman, that this is the only provision we have for the education of children on military reservations. It is one of the diffi-

culties at many posts, that no funds are available for the maintenance of special schools for children on the posts or for their tuition.

Senator WADSWORTH. How does it happen that the Ordnance Department is the only branch of the service that has this?

General WILLIAMS. It came about as a war-time measure, Senator, in some of these isolated places. Take, for instance, the powder plant at Hickory, which is 7 or 8 miles from Nashville and which was built right out in the open field; appropriation was made there for the schooling of the children of the employees. And so it was at Nitro, and at a good many other places, and it has been continued as a special appropriation since that. That was the origin of it, during the war.

General PEIRCE. At most Army posts there are not anything like the number of civilians that were employed at those ordnance establishments. The children at most Army posts are the children of officers and enlisted men, and they have other facilities for education; but this was to provide for the cases of civilian employees, who, from the location of the establishments, had to live at such a distance from the town or any other place where there was a school that the children could not attend school there.

General WILLIAMS. It was almost impossible for them to get there.

Senator SPENCER. Where is Picatinny?

General WILLIAMS. At Dover, N. J.; 45 miles from New York.

Senator SPENCER. I see that you had 19 children there, and a \$1,500 teacher. Are there no schools adjacent to that place at all?

General WILLIAMS. None near by, I think.

Major HARRIS. None within 4 miles, in any direction.

Senator SPENCER. So if you did not have that school the children would have no educational facilities?

General WILLIAMS. No. Before the war they had a peculiar situation there. All of the children on the reservation went to school on the reservation, and the county furnished the teacher; but the county has refused in recent years to do that, so that Picatinny is set down as one of the places to be covered by this service.

Senator HITCHCOCK. How many civilians are there?

Major HARRIS. Six hundred employees, and about 25 families living on the reservation; and there are children of employees living off of the reservation as well.

Senator WADSWORTH. How about Muscle Shoals?

General WILLIAMS. We run a school at nitro plant No. 2.

Senator WADSWORTH. How many children are there?

General WILLIAMS. At the nitro plant there are four teachers and 106 children.

Senator LENROOT. How many employees does it take at Muscle Shoals to take care of that plant?

General WILLIAMS. We have about 125. But they do not all live on the reservation. It may be that some of these children are not on the reservation.

Major HARRIS. They all live on the reservation—all the employees there.

Senator LENROOT. What is that?

Major HARRIS. All the employees live on the reservation at Muscle Shoals.

Senator LENROOT. How many do you have there?

Major HARRIS. There are 106 children.

Senator LENROOT. And how many employees?

General WILLIAMS. One hundred and twenty-five employees.

Senator LENROOT. Is it possible that there are 100 children with only 125 employees?

General WILLIAMS. We likewise rent in the village there——

Major HARRIS (interposing). There are a lot of these children who are children of Engineer Department employees on the dam who live in the village. They go there also.

Senator WADSWORTH. These are not all children of ordnance employees?

Major HARRIS. No, sir.

Senator LENROOT. Do you maintain a school here for people living in a village?

Major HARRIS. That is a Government village on a Government reservation.

Senator LENROOT. What did you mean by the statement that some lived on the reservation and some did not?

Major HARRIS. There is a village on the ordnance reservation in which Ordnance Department employees and Engineer Department employees both live, and the children come indiscriminately from both classes.

Senator LENROOT. But all on the reservation?

Major HARRIS. Yes.

General WILLIAMS. The residences in the village are rented to the employees of the Ordnance Department and the Engineer Department.

Senator LENROOT. And there are some employees on the dam?

Major HARRIS. Yes.

Senator LENROOT. How many?

Major HARRIS. I do not know that.

Senator LENROOT. I supposed that was closed.

Major HARRIS. Not entirely closed.

Senator LENROOT. I suppose you have caretakers there.

General WILLIAMS. Yes; and they have a watch on the structure.

Senator WADSWORTH. That is not under you?

General WILLIAMS. No, sir; that is under the engineers.

Senator LENROOT. Does it require 125 employees to watch nitro plant No. 2 and keep it in shape?

General WILLIAMS. Yes, sir.

Senator WADSWORTH. It seems to me like a large number.

General WILLIAMS. There are a great many buildings there, and there is a large area to be covered, and we have cut that right down to the bone.

Major HARRIS. It takes a good deal of examination and inspection of the machinery to keep it from deteriorating until Congress decides what is to be done with it.

Senator WADSWORTH. Do they keep it up?

Major HARRIS. Yes, sir; they make a periodic inspection, and where inspection shows that cleaning or repair is necessary it is done.

Senator HITCHCOCK. This reminds me of the condition that they found out in western Nebraska. They found their school taxes were very high in one district, and on investigation they found that they were all for the purpose of paying a school-teacher's salary, and when they got there they found that the school-teacher was the wife of the depot agent, and the children in the school were the children of the depot agent.

Senator LENROOT. There is no more reason for our maintaining schools on ordnance reservations than on other military posts.

General WILLIAMS. We are more isolated in some of our establishments and we have not the facilities there for education.

Senator WADSWORTH. What is the general practice in the Army posts about the children of the officers and of the enlisted men?

General WILLIAMS. I think that generally they hire teachers themselves—the officers do; and the enlisted men's school is run by the officers.

Senator WADSWORTH. The children of the enlisted men are taught by the officers?

General WILLIAMS. No; I was speaking about the enlisted men themselves. They have schools for them.

Senator WADSWORTH. But I was speaking about the children of the enlisted men, of the privates and noncommissioned officers.

General WILLIAMS. I do not know about that. It has been so long since I was on an Army post that I do not know.

Senator HITCHCOCK. How many posts are included in this?

Major HARRIS. The Aberdeen Proving Grounds, Edgewood Arsenal, Picatinny Arsenal, and the two nitrate plants. Those are the only places covered specifically; there are several places where tuition will have to be paid for children.

Senator WADSWORTH. The appropriation is not large, and we all have a sympathy with this kind of work, but it becomes a matter of policy.

General WILLIAMS. Yes, sir.

Senator WADSWORTH. And there certainly must be other isolated posts of the Army where the school question is a considerable problem.

Senator HITCHCOCK. I remember something about it with regard to Leavenworth. I am quite sure the same question was up there. That is not ordnance.

General WILLIAMS. No, sir.

Senator WADSWORTH. I personally have not examined into it, but it seems, at first blush, that we should do it for all of them or else do it for none of them.

Senator JONES of Washington. Some of them may be located where they are close to public schools, while others may be located where there are no public schools near by.

Senator WADSWORTH. The general points out that in some cases, where they are located near public schools, the public-school authorities make parents of the children pay tuition fees, on the ground that they are not taxpayers in the district.

Senator JONES of Washington. Yes.

Senator WADSWORTH. Perhaps we can take that up with the Secretary as a matter of policy. What is the next item, General?

SEACOAST DEFENSES, UNITED STATES—ARMAMENT OF FORTIFICATIONS.

PURCHASE, MANUFACTURE, AND TEST OF SEACOAST CANNON.

General WILLIAMS. The next item is:

For purchase, manufacture, and test of seacoast cannon for coast defense, including their carriages, sights, implements, equipments, and the machinery necessary for their manufacture, \$450,000.

We submitted originally an estimate of \$750,000 for this purpose, and then, after some 16-inch guns were turned over to us by the Navy under the armament treaty, and we found we were able to use some of those guns, we cut that amount from \$750,000 to \$585,000, and the House allowed us \$450,000.

COMPLETION OF 16-INCH GUNS.

The main purpose of this is for continuation of work on authorized projects, on the 16-inch gun mounts and 16-inch howitzers and their carriages, and on 14-inch railway carriages for the seacoast defense and proof mounts for the same.

These 16-inch guns and howitzers are being manufactured under a regular approved program, which we had expected to finish in about 1926; and the amount of money asked for is the amount required to carry on the work during the year 1923 at the rate that has been decided on, so that the project can be completed within the time limit.

Senator WADSWORTH. Where are they being made?

General WILLIAMS. The guns are being made at Watervliet Arsenal and the carriages at Watertown Arsenal.

The money that we will have from this appropriation is for the Watervliet Arsenal and a very considerable portion of what we will have for the Watertown Arsenal.

Senator HITCHCOCK. How many 16-inch guns does that program demand?

General WILLIAMS. The program contemplates 26 guns and howitzers, there being 22 of the 16-inch guns and 4 of the 16-inch howitzers.

Senator HITCHCOCK. Sixteen-inch howitzers?

General WILLIAMS. Four of the 16-inch howitzers; yes, sir; and of the 22 16-inch guns 2 are under a different appropriation from this, or A. of F. item, D. F. G.

Senator HITCHCOCK. How long does it take to make a 16-inch gun?

General WILLIAMS. A year and a half, I should say, under full production.

Major JENKS. About two years and a half, now.

Senator JONES of Washington. They are all now in course of manufacture? You are not making them one at a time, but they are all going along simultaneously?

Major JENKS. Yes, sir.

Senator JONES of Washington. If this is reduced to \$450,000, how much would that delay your program?

General WILLIAMS. Major Jenks, can you estimate that?

Major JENKS. About 25 per cent; that is, it would make it about one-fourth longer.

Senator JONES of Washington. When was it that you fixed the time of completion of these guns; in 1926?

Major JENKS. About 1928 for the original program.

Major JENKS. The Coast Artillery select the 441 locations for the guns and carriages; I do not know their program of location.

Senator LENROOT. How much of this will be completed this year?

Major JENKS. At the end of this summer we expect to have six of this total number completed, and we may complete one more during the fiscal year 1923, but that is now doubtful.

Senator HITCHCOCK. You will have six by the end of this year?

Major JENKS. Yes, sir; with the exception of certain auxiliary loading equipment.

Senator LENROOT. This appropriation will enable you to do that much?

Major JENKS. The appropriations which have been granted us in the past are those on which we are bringing these six to completion.

Senator LENROOT. Is that a continuing appropriation?

Major JENKS. No, sir.

Senator LENROOT. It continues up to the 1st of July?

Major JENKS. Yes, sir.

Senator LENROOT. Whenever this is complete, that appropriation will cease, that you speak of?

Major JENKS. No; this just provides for the work to be done on the program during the fiscal year. There are already some completed, and there will be further completions this fiscal year. We will have completed six of the whole number of the guns and carriages this summer, and we hope to complete one additional during the fiscal year 1923.

Senator HARRIS. How many did you say you had within 10 per cent of completion?

Major JENKS. Those are the six.

Senator HARRIS. You will complete them this year?

Major JENKS. We will complete them this year with the exception of certain auxiliary equipment.

Senator LENROOT. The per cent of the completion is not dependent upon your appropriation?

Senator WADSWORTH. You are saying "we hope to do this" and "we plan to do that."

Major JENKS. The completion of the six is comparatively independent of this appropriation.

Senator LENROOT. You have money enough now for that?

Major JENKS. Except for certain equipments for those six.

Senator LENROOT. This appropriation will be used for carrying on those?

Major JENKS. And we hope to complete one in addition to that on this appropriation.

Senator LENROOT. Out of the appropriation that the House passed?

Major JENKS. Yes, sir.

Senator LENROOT. I think I have got that.

Major JENKS. And then the remainder of it will be used to carry on the remainder of the work so that we will get a continuing output during the succeeding fiscal years.

Senator WADSWORTH. Are there any other questions on that matter?

Senator HITCHCOCK. How many 16-inch guns have we all together now, General?

Gen. WILLIAMS. There is one 16-inch gun now mounted in fortifications. There is another one at the Aberdeen Proving Ground which will be mounted in fortifications this summer. Those are the only 16-inch guns, in addition to those covered by this program.

Senator HITCHCOCK. Do you expect to get any more 16-inch guns from the Navy?

Major JENKS. Yes, sir.

General WILLIAMS. The Navy will have so many 16-inch guns that it will not be necessary for us to build any more when we have completed the number that we have planned.

Senator HITCHCOCK. Can you use those buildings They have not got to be scrapped?

Senator WADSWORTH. Oh, yes; they can use them.

General WILLIAMS. Another thing about the Navy is that they have the powder and projectiles for those guns, and they will be turned over to us.

Senator HITCHCOCK. So that this is the end of the appropriation for 16-inch guns except what may be necessary for a year or two to finish up this uncompleted work?

Senator WADSWORTH. Unless you want to take over more Navy guns and build more mounts.

General WILLIAMS. They have armament for the——

Senator LENROOT. Does this include the mobile railroad artillery?

Major JENKS. Yes, sir; this appropriation includes four of the 14-inch railroad mounts.

Senator LENROOT. What is the status of those?

Major JENKS. The first one we expect to complete about July 1, and the others are at present about 30 per cent complete.

Senator HITCHCOCK. These naval guns which we now propose to use on land, later on can be reconverted for use as naval guns, and can be used on board vessels?

General WILLIAMS. Yes, sir; they could be mounted on vessels. We will simply take the gun and its recuperator without any modification to amount to anything.

Senator HITCHCOCK. So that disarmament to that extent does not disarm the Navy?

Senator WADSWORTH. Are there any more questions on that item? How about the next item, General?

PURCHASE, MANUFACTURE, AND TEST OF AMMUNITION FOR SEACOAST CANNON.

General WILLIAMS. The next item is: .

For the purchase, manufacture, and test of ammunition for seacoast cannon, and for modernizing projectiles on hand, including the necessary experiments in connection therewith, and the machinery necessary for its manufacture, \$350,000.

\$350,000 was allowed for that, and our estimate was \$431,520.

The objects for which this money would be expended will be to complete among other things fuse development, which we have now in progress, and which is very important for us, the fuse being the fuse that is used in the armor piercing projectiles, and with which

we have had in the past a good deal of trouble; but we think now we see the solution to it.

Then we also wanted to conduct certain experiments on exterior ballistics with a view to determining more accurately the trajectory of the projectile, and acquiring data for use in our exterior ballistics; and also continuing the development of the work authorized under the Westervelt Board project on a smokeless, flashless, nonhydroscopic powder, and the improvement of the methods of igniting charges.

One of the most important things we have ahead of us now in the matter of development work is the endeavor to get a powder that will not be affected by the moisture, and that will not show a big flash at night. Of course it is very important, so far as night firing is concerned, to not give our position away by a great big flare that comes from the muzzle of the gun. We ourselves are working at that at Picatinny Arsenal and the Du Pont Powder Co. are also working at it, and we have made such progress as to be greatly encouraged. It looks very good at the present time.

Senator HITCHCOCK. Can you segregate there, and tell us how much of that cost is for ammunition for use and how much is experimental?

General WILLIAMS. Yes, sir. For manufacture for issue there is \$256,520.

Senator WADSWORTH. Apparently you did not have a surplus coming over to you of that class of ammunition.

General WILLIAMS. Well, no sir; not in seacoast ammunition. This is balancing up rounds, and we did not have a surplus from the war.

Senator HITCHCOCK. What is the size of this ammunition?

Major HARRIS. It runs all the way from 16-inch to 6-inch. We have projectiles and powder, and the bulk of this money is for the making up into rounds of a sufficient number of propelling charges to match each of the projectiles on hand and available, within the allowance tables for the seacoast guns. The \$256,520 is largely for the assembling of charges.

SUPPLY OF AMMUNITION ON HAND.

Senator HITCHCOCK. How much of that supply of ammunition have you on hand now?

Major HARRIS. We have the data here.

Major MAXWELL. To give it caliber by caliber, we have on hand and being made from funds already appropriated, for 16-inch guns, 800 rounds; for 14-inch gun, 8,000 rounds; for 12-inch mortar, 43,479; for 12-inch gun, 15,729 rounds; for 10-inch gun, 37,756 rounds; for 8-inch gun, 23,476 rounds; for 6-inch gun, 96,937 rounds.

General WILLIAMS. The ammunition is armor-piercing ammunition, coming down from the 16-inch through the 12-inch to smaller calibers. Some of it is old ammunition that was once armor-piercing ammunition but is no longer equal to the type of armor that it has to meet.

Senator HITCHCOCK. That is, it is smaller?

Major MAXWELL. No; powerful enough to penetrate modern armor.

General WILLIAMS. One thing we should say about nearly all of this armor-piercing ammunition, and that is that the projectile part of it is to-day practically worthless. There was no greater advance made during the war in anything than there was in armor-piercing

projectiles. At the beginning of the war the acceptance tests were made of the direct or normal impact against the plate. To-day we require an oblique impact of 20° , and we get results up to 30° ; and when we say we have so many thousands rounds for the 12 or the 10 inch guns it is misleading. It is not up-to-date ammunition.

Senator HITCHCOCK. What are we going to do with it? We have 40,000 rounds for one weapon and 15,000 rounds for another. That is a great deal, is it not?

General WILLIAMS. It is a great deal.

Senator HITCHCOCK. Will you store it?

General WILLIAMS. We will store it. It would be useful. Take high-angle fire, it would go through the deck of a ship, but it would not have very much chance to go through the side armor of a battleship, for instance. But if we had no better, we would have to use it in the next war.

Senator HITCHCOCK. Is it necessary to make this advance now? Is it necessary to add to that enormous store of ammunition now, General?

General WILLIAMS. From my point of view it is going to be necessary; that is, if you are going to be up-to-date and prepared, so far as your seacoast guns are concerned, for an action with a modern battleship. It is going to be necessary to replace all the ammunition you have.

Senator HITCHCOCK. Those are short-range guns.

General WILLIAMS. The 8 and 10 inch guns are practically obsolete. We make no more of them at all, but we retain them in their positions, those that we have, because they would be of some value.

Senator HITCHCOCK. This ammunition you are making is for the 16-inch guns and the larger caliber armament?

General WILLIAMS. The important guns now are the 16-inch guns, of course, the 14-inch guns, the 12-inch guns, and the 6-inch and below.

Senator HITCHCOCK. You are making, here, a quarter of a million dollars' worth of ammunition, and I was trying to find out for what sized guns you are making it.

General WILLIAMS. Covering various calibers.

Major HARRIS. For 16-inch guns and howitzers, \$96,520. For 12-inch, balancing the 12-inch seacoast ammunition, \$90,000; in 12-inch we now have 62 rounds of assembled ammunition per gun, which is less than half the reserve as specified; this amount of money will add about 10 to 15 rounds per gun more, by assembling the components which we have on hand; and there is an item of \$70,000 for the manufacture of smokeless powder for 16-inch guns.

Senator HITCHCOCK. That is in addition to the \$96,000?

Major HARRIS. The \$96,000 is for the assembling of 16-inch gun ammunition.

Senator HITCHCOCK. Yes.

MANUFACTURE OF POWDER AT PICATINNY ARSENAL.

Major HARRIS. The \$70,000 is an item for the manufacture of powder that is required, or else we will have to close down the Picatinny Arsenal.

Senator HITCHCOCK. Do you mean that it is to give employment?

Major HARRIS. Not exactly. That is one of the reasons. We could get along without that powder this year, if we closed down the arsenal and discharged all employees.

Senator HITCHCOCK. Then, that powder is not really needed? It is being manufactured in order to employ the men?

Major HARRIS. No; I would not say that. It is needed, but we could get along for a year or two without it.

Senator HITCHCOCK. How many men are working there?

Major MAXWELL. About 60 men are employed in the powder factory.

Senator HITCHCOCK. We are up against it again, as we were yesterday in regard to the manufacture of rifles at Springfield; 200 men there making rifles, not because we need the rifles but because we want the men.

General WILLIAMS. Not because we want the men alone. That is only a part of it. The Springfield Armory is the only place in the country where the Springfield rifle is made. We can not come to you and say, "We want that money because we need the rifles," because we have about 3,000,000 of those perfectly good rifles now, and I would not want to ask you for the expenditure of a lot of money because you need the rifles. The thing that I do state, though, is absolutely essential, is that this arsenal must be kept going, and we must keep alive the art of the manufacture of the military rifle, because it does not exist anywhere else in the country. We face the same problem about a good many of our things.

Senator HITCHCOCK. That is, smokeless powder?

General WILLIAMS. Yes, sir.

Senator HITCHCOCK. That is, only for use in shells. It has still got to be put in the shells?

Major MAXWELL. No, sir; that is the charge of the gun, that propels the shell.

SUPPLY ON HAND OF SMOKELESS POWDER.

Senator HITCHCOCK. How much smokeless powder have you on hand?

Major MAXWELL. Totaling all kinds of powder, we have at present about 150,000,000 pounds of bulk smokeless powder in addition to loaded ammunition. Some of that will be, and is being, disposed of, so that eventually we will get down to about 100,000,000 pounds of smokeless powder in bulk, in addition to that powder now in loaded rounds of ammunition.

Senator HITCHCOCK. You are selling it?

General WILLIAMS. Yes, sir; we are selling some of it. That powder is not interchangeable. It is powder made with certain web thicknesses, which correspond to the calibers, and is for use in only one caliber of gun, and it is not usable in a gun of another caliber. You can not use powder made for a 12-inch gun in a 16-inch gun.

Senator HITCHCOCK. What are you getting for that powder?

General WILLIAMS. 3 to 4 cents a pound.

Senator HITCHCOCK. What are we paying for powder?

General WILLIAMS. Between 40 and 50 cents a pound during the war. About 60 cents a pound now.

Senator HITCHCOCK. At which arsenal is that?

General WILLIAMS. At Picatinny Arsenal, near Dover, N. J.

Senator HITCHCOCK. How many men are employed there—200?

Major MAXWELL. Sixty men in the powder factory; about 600 altogether at Picatinny Arsenal.

Senator LENROOT. General, has the development of airplanes and high explosives affected the value of this form of seacoast defense?

General WILLIAMS. The gun is simply one of the elements of seacoast defense. My own personal opinion is that it becomes the least important element in the coast defense. It used to be a primary weapon, but with the development of the submarine, mines, and, above all, of the airplane the relative value of the gun has shrunk. That is my own opinion.

Senator LENROOT. Is it possible to look forward to the time when we will not recognize the 16-inch gun as of value in repelling a naval attack?

General WILLIAMS. I do not think so. I think the gun will always have its value, irrespective of the development of the submarine or of the airplane. It is a weapon that is fixed in position, and within its range it is very accurate, and it gives you positive protection at certain places.

Senator LENROOT. If we controlled the air, I assume that we might have a perfect defense against naval attack. If we did not control the air, would not these guns be subject to destruction by the opposing force controlling the air?

General WILLIAMS. If the opposing force control the air, then these guns, mounted in fixed position, of course, are subject to attack from the air, and I should say to a fairly destructive attack.

Senator JONES of Washington. The bomb that would sink a battleship would probably disable one of these guns?

General WILLIAMS. If it struck anywhere near the gun it would destroy it.

Senator HITCHCOCK. Are they protected?

General WILLIAMS. The protection heretofore has been from direct fire and not from vertical fire. Vertical protection is the most difficult protection to provide for any kind of weapon; and our old method of mounting guns in a fort simply serves as a beautiful target for an airplane if it goes anywhere near it. You could not miss seeing it, I should say, for miles and miles. It is a great big thing.

Senator LENROOT. General, I appreciate that perhaps you can not answer this question. I might put it this way: Would there be some ground for our assuming, in view of the tests of last year, that the airplane will so control the situation of a naval battleship that the battleship would not come within range of these guns?

General WILLIAMS. That is a rather difficult question to answer.

Senator LENROOT. I appreciate that.

General WILLIAMS. Of course, circumstances could arise in which the battleship could come near the gun, and probably would arise. I do not think that the air is such a complete protection yet that we can afford to give up every other protection.

Senator LENROOT. But you would say that the vital importance of these guns has been weakened by the development of the airplane?

General WILLIAMS. I should say the relative importance as an element in the whole system of seacoast fortification.

Senator WADSWORTH. That is your opinion?

General WILLIAMS. That is my opinion.

Senator WADSWORTH. You can not measure it exactly?

General WILLIAMS. No, sir.

Senator HITCHCOCK. If they are not concealed, their position is unavoidably known to every attacking force?

General WILLIAMS. Yes; it would be very difficult to conceal one of these. Of course, our method of mounting heretofore has been practically the reverse of concealment, in so far as observation from the air is concerned.

Senator WADSWORTH. Yes; you had a mass of nice white concrete masonry supporting them?

General WILLIAMS. Acres of it; yes, sir.

Senator WADSWORTH. Is there anything else on that? If not, will you take up the next item?

PURCHASE, MANUFACTURE, AND TEST OF AMMUNITION, SUBCALIBER GUNS FOR MOUNTAIN, FIELD, AND SIEGE ARTILLERY PRACTICE.

General WILLIAMS. The next item is:

For the purchase, manufacture, and test of ammunition, subcaliber guns, and other accessories for seacoast artillery practice, including the machinery necessary for their manufacture, \$60,000.

That was allowed by the House.

Senator WADSWORTH. They gave you the Budget figure?

General WILLIAMS. Yes, sir.

ALTERATION AND MAINTENANCE OF SEACOAST ARTILLERY.

Senator WADSWORTH. The next one is the Budget figure—

For alteration and maintenance of seacoast artillery, including the purchase and manufacture of machinery, tools, materials necessary for the work, and expenses of civilian mechanics, \$350,000.

There is no change there.

General WILLIAMS. No, sir.

Senator WADSWORTH. That is repair work?

General WILLIAMS. Yes, sir; maintenance and repair.

Senator WADSWORTH. The next is:

SEACOAST DEFENSES, INSULAR POSSESSIONS.

PURCHASE, MANUFACTURE, AND TEST OF SEACOAST CANNON.

General WILLIAMS (reading):

For purchase, manufacture, and test of seacoast cannon for coast defenses, including their carriages, sights, implements, equipments, and the machinery necessary for their manufacture at the arsenals, \$150,000.

Senator WADSWORTH. There is no change there?

General WILLIAMS. No, sir.

Senator WADSWORTH. How about the next one?

General WILLIAMS. The next item reads:

PURCHASE, MANUFACTURE, AND TEST OF AMMUNITION FOR SEACOAST CANNON.

For purchase, manufacture, and test of ammunition for seacoast cannon, including the necessary experiments in connection therewith, and the machinery necessary for its manufacture, \$67,700.

Major HARRIS. We reduced that, in view of the available naval material, from \$225,000 to \$67,700, and the House gave us what we asked for.

General WILLIAMS. Our original estimate on that was \$225,000, but in view of the material that we are getting from the Navy we reduced it to \$67,700, and that was allowed by the House.

Senator HITCHCOCK. Did we not have that matter of seacoast cannon here once before?

General WILLIAMS. This is for insular possessions.

Senator WADSWORTH. What is the next item?

General WILLIAMS. The next item is:

ALTERATION AND MAINTENANCE OF SEACOAST ARTILLERY, ETC.

For alteration and maintenance of the seacoast artillery, including the purchase and manufacture of machinery, tools, and materials necessary for the work, and expenses of the civilian mechanics. \$60,000.

We asked for \$90,000 on this, and the amount was reduced to \$60,000. Our appropriations for the maintenance and upkeep of the armament, both seacoast and mobile, is, of course, very important to us, and this year perhaps there has been an addition to this work made because of the duty caused by the skeletonizing of many of the organizations, because of which material has been turned in, and that material has to be gone over and put in storage so that no more deterioration will take place in it.

Senator HITCHCOCK. Is this the same ammunition, General, under seacoast defense for insular possessions, that we have had over here?

General WILLIAMS. It is in addition to that; but the same character of ammunition.

Senator HITCHCOCK. But whatever applies to that applies to this here?

General WILLIAMS. Yes.

Senator HITCHCOCK. You included in the supply, of course, all that artillery?

General WILLIAMS. Yes, sir.

Senator WARREN. You had \$94,000 for that last year?

General WILLIAMS. \$94,000; yes, sir. Major Schimelfenig can give you the details of what this money is supposed to be spent for, the alteration and maintenance of the seacoast artillery.

Senator WADSWORTH. Very well.

Major SCHIMELFENIG. In the Hawaiian Islands we propose to spend \$39,400 for maintenance of material and \$18,000 for spare parts for that material.

In the Philippines it is proposed to spend \$22,600 for maintenance and \$10,000 for spare parts.

The value of the material in Hawaii and the Philippines, \$6-185,000.

Senator HITCHCOCK. That means cannon?

Major SCHIMELFENIG. Seacoast artillery.

Senator HITCHCOCK. \$6,000,000?

Major SCHIMELFENIG. And anti-aircraft material.

Senator WADSWORTH. That is a standard item, is it not?

Major SCHIMELFENIG. Yes, sir.

General WILLIAMS. No matter what is done with the garrison in the Philippines, it will be essential to maintain the armament there in proper condition, and that is what we are asking for this money to do.

Senator HITCHCOCK. What sort of a defense have you got there now; Corregidor Island is about all there is, right there?

General WILLIAMS. That is the main defense.

Senator HITCHCOCK. Have you the figures?

Major SCHIMELFENIG. I have the figures here.

Senator WARREN. There is something at Subig Bay?

Major SCHIMELFENIG. Yes; we have some 3-inch and 10-inch guns at Subig Bay.

In the Philippine Islands there are six 3-inch guns, two 12-inch guns on barbette carriages; four 6-inch guns, two 12-inch guns, two 14-inch guns on disappearing carriages; four 14-inch guns in turret mounts; twenty 12-inch mortars; sixteen antiaircraft guns.

Senator WADSWORTH. How serious is that reduction? Do you think your material will go down greatly if you do not get that \$90,000?

General WILLIAMS. There would be increased deterioration. It would simply mean that we could not take the care of it that we can with the larger amount of money. To express that in percentage, I would not like to do it. I do not think you could tell near enough to express it in a definite percentage.

Senator WADSWORTH. If there is nothing else on that item, will you go to the next one, General?

General WILLIAMS. The next item is:

SEACOAST DEFENSES, PANAMA CANAL.

PURCHASE, MANUFACTURE, AND TEST OF AMMUNITION FOR SEACOAST CANNON.

For the purchase, manufacture, and test of ammunition for seacoast and land defense cannon, including the necessary experiments in connection therewith, and the machinery necessary for its manufacture, \$85,000.

The amount under our original estimate was \$225,000, which we reduced to \$132,000, and the House gave us \$85,000.

If we got only the \$85,000 it will affect very largely our manufacture of ammunition for the 3-inch antiaircraft guns in the Canal Zone. We have not a great deal of that ammunition on hand now, and we are very anxious to provide more for these guns. The total deficit is 30,000 rounds, and we propose to manufacture 10,200 rounds for the money asked for; and that, of course, would be in proportion to the guns.

Senator HITCHCOCK. This is for antiaircraft guns?

General WILLIAMS. Yes, sir.

Senator HITCHCOCK. Ten thousand rounds.

General WILLIAMS. Yes, sir.

Senator HITCHCOCK. Last year you had an appropriation of \$250,000?

General WILLIAMS. \$250,000.

Senator HITCHCOCK. What did you do with that? Did not that provide enough?

Major MAXWELL. That has been spent to supply the ammunition for the 16-inch gun that is down there, and for bringing up the supply of the propelling charges for the projectiles for the major armament, the 12-inch and 14-inch guns.

The 3-inch antiaircraft gun is a more recent addition to the armament, and there are 36 of them there, and they are practically without ammunition to-day. This 10,200 rounds will only give us approximately 300 rounds apiece for those guns. Cutting that in two—

Senator HITCHCOCK. We have been appropriating year after year several hundred thousands of dollars, I should say, for this item of Panama.

General WILLIAMS. Yes, sir.

Senator HITCHCOCK. You have not been firing that ammunition. What has become of it?

General WILLIAMS. We have spent it, as Major Maxwell said, for ammunition for the other guns.

Senator HITCHCOCK. Have they been fired?

General WILLIAMS. We have regular target practice every year, and the money has been spent for the reserve we want to keep on hand.

Senator HITCHCOCK. I can not understand how it is that in time of peace we appropriate hundreds of thousands of dollars for ammunition for those guns, although there is apparently no destruction of it.

General WILLIAMS. There has been a continual increase in the number of guns since the seacoast project was initiated, and not only in the number of guns but in the number of different calibers, and you have to put in ammunition for each of them.

Major MAXWELL. The ammunition for the 16-inch gun particularly is very expensive, and the appropriations that have been made have not gone so very far toward providing any stock for the large guns.

Senator HITCHCOCK. Is this \$250,000 all expended for 16-inch gun ammunition?

General WILLIAMS. You want to know what we have done with the \$250,000 appropriated this year?

Senator HITCHCOCK. Yes.

Major MAXWELL. We spent on the manufacturing of complete rounds—that is, providing propelling charges for the projectiles that we had—\$70,000; for the development of 16-inch ammunition, \$5,000; for the test and development of components of 16-inch ammunition, \$20,000; and the remaining obligations are for the supplying of all of the 16-inch ammunition and the 14-inch ammunition necessary to meet the allowances set up for the guns in Panama; so that we are going as far as we can, beginning with the 16-inch, and coming down toward the supplying of stocks that have been determined upon.

Senator HITCHCOCK. Then the situation is—take the matter of the 16-inch gun—

General WILLIAMS. There is only one there.

Senator HITCHCOCK. Only one there?

General WILLIAMS. Yes, sir.

Senator HITCHCOCK. And we have \$96,000 worth of 16-inch gun ammunition on hand. We appropriated in this under the head of seacoast defenses of the United States for additional ammunition, and over here we appropriated last year \$250,000 for 16-inch ammunition.

General WILLIAMS. Not for 16-inch ammunition.

Major MAXWELL. That was for all ammunition there on the Panama Canal.

Senator HITCHCOCK. Have we got to go on indefinitely appropriating money for ammunition when we are not at war?

General WILLIAMS. I see no end to it whatever, sir. The thing that you must look forward to is that your smokeless-powder stock will deteriorate. So far as we know, it has had a life of about 15 years. That means that if you are going to provide ammunition for the guns that you have you will have to appropriate for about 6 per cent of your war needs every year.

Senator HITCHCOCK. Six per cent?

General WILLIAMS. About 6 per cent—it is a little over 6 per cent.

Senator HITCHCOCK. That is on the theory of the powder having a life of 15 years?

General WILLIAMS. Yes.

Senator HITCHCOCK. But we are now selling this smokeless powder which we have at 4 cents a pound, and making more at 40 cents a pound.

General WILLIAMS. That is true. That is what we are doing.

Major HARRIS. This powder is not interchangeable for different calibers of guns.

General WILLIAMS. It is not interchangeable at all. We had left over from the war a surplus of powder for certain calibers, while for other calibers we did not have enough.

Senator HITCHCOCK. What is it that you have the surplus on?

General WILLIAMS. I would say, right away, that we have a surplus for the 75-millimeter and possible for the 155-millimeter howitzer, those being what we used most of in the Army.

Senator HITCHCOCK. Who buys this surplus powder that is sold?

General WILLIAMS. It is used as a component in the manufacture of dynamite, and there are two or three explosive companies that buy it, the Duponts being one of them; and it is also used in some way in making what they call a wash for artificial leather. The manufacturers of artificial leather used a certain amount of it.

Senator HITCHCOCK. Would you say that we have got to be ready to appropriate next year hundreds of thousands of dollars more for the manufacture of ammunition, when we have now such enormous stores on hand?

General WILLIAMS. I think you must; and this has got to be done every year.

Senator HARRIS. What per cent of the powder do the Duponts buy?

General WILLIAMS. I do not know. We invite competition in the open market and we sell to the highest bidders.

Senator HITCHCOCK. You say you are going to reduce this 150,000,000 pounds down to 100,000,000 pounds?

General WILLIAMS. That will be about our surplus of bulk powder.

Senator HITCHCOCK. And then we will have to continue manufacturing powder, although we have this amount?

General WILLIAMS. Yes; if you are going to keep up your ammunition supply you will have to provide for the manufacture of 6,000,000 pounds of powder a year, or a little bit over.

Senator HITCHCOCK. How many rounds is it estimated we must have for these guns in storage?

General WILLIAMS. That is all worked out in accordance with the mobilization curve and the rate at which the men are called to the colors. I have not that in mind.

Senator HITCHCOCK. Is it supposed to be in contemplation of active war?

General WILLIAMS. The theory of the reserve is that it must be sufficient to supply the troops in the field and in training until your new production can be brought in, and thereafter supply all the needs of the troops. That is the basis of any kind of a reserve.

Senator HITCHCOCK. Will you put in the record, after thinking it over, the approximate length of active warfare that we would want to cover after war begins.

General WILLIAMS. There is no definite thing you say. But, for instance, take clothing.

Senator HITCHCOCK. Just let us confine it to ammunition, General.

General WILLIAMS. There is no precise answer to that. I would have to select items. For instance, you can manufacture a Colt revolver quicker than you can manufacture a 75-millimeter gun; so that the answer to that question would be the answer to selected items.

Senator HITCHCOCK. You must have figured out, for instance, how many rounds you would want to have on hand, of ammunition for 16-inch guns, in case of war.

General WILLIAMS. Yes. The thing there is, we keep on hand practically the life of the gun.

Senator HITCHCOCK. What would that be?

General WILLIAMS. Two hundred and fifty rounds.

Senator HITCHCOCK. Two hundred and fifty rounds for each 16-inch gun?

General WILLIAMS. Yes.

Senator HITCHCOCK. What does a round cost?

General WILLIAMS. About \$1,500. Now, the amount of ammunition that you must keep on hand, say, for a 75-millimeter gun is the amount that will be needed to supply troops until you can bring your new production into production in order to supply thereafter everything needed.

Senator LENROOT. When you say that you estimate the number of rounds on hand at the life of the gun, is that on the assumption that we must assume that the gun would be worn out before we could get a supply of ammunition for it?

General WILLIAMS. That you must be ready to wear it out.

Senator LENROOT. No; that it would be worn out. We must assume that it would be worn out before we could get a supply of ammunition for it?

General WILLIAMS. The gun might not be fired at all.

Senator LENROOT. I understand that; but you are going on the assumption that it would be worn out before you could supply new ammunition for it.

General WILLIAMS. Yes; that the particular case might arise in which it would be necessary for you to fire that number of rounds.

Major HARRIS. In the case of the seacoast ammunition, the life of the gun would be used up in firing the amount of ammunition on hand. There would be no reinforcement.

Senator HITCHCOCK. For the smaller guns, the life of a gun is much greater and the reserve would be larger?

General WILLIAMS. Yes. For our 75-millimeter guns, I think, we are keeping a reserve of 5,000,000 rounds.

Senator HITCHCOCK. And during the war our total consumption was only about 7,000,000 rounds for the 75-millimeter guns?

General WILLIAMS. The total consumption of 75-millimeter ammunition was about 6,500,000 rounds.

Major HARRIS. We only got 30 divisions of troops into the line at the maximum. A large percentage of those guns were in action a very short time.

Senator HITCHCOCK. It sounds like a tremendous reserve to keep on hand—to keep on hand a reserve sufficient to fight the European War over again.

Major HARRIS. Each division has 64 guns, 40 rounds per day for each gun, which is 2,600 rounds per day for each division. It does not take long to run into hundreds of thousands of rounds for an army. It will take about 12 months to place contracts and get production of new ammunition for the 75-millimeter gun and get the first of that ammunition on the firing line; so that you have practically got to have in reserve an amount of 75-millimeter ammunition sufficient to carry you through the first year of a war if you are going to supply the troops.

General WILLIAMS. The whole question of our reserve is determined by and directly based upon what we call the mobilization curve—that is, the rate at which the troops are called to the colors and commence training, and then the rate at which they get into the operations.

Senator HITCHCOCK. For the aircraft guns, at what rate should you have on hand ammunition for them?

General WILLIAMS. Those aircraft guns we are speaking of here are at the seacoast defenses. With the 10,000 rounds we asked for it would be about 300 rounds per gun in the Canal Zone. The actual life of that gun is over 2,000 rounds.

Senator HITCHCOCK. So that you will want more?

General WILLIAMS. We will keep on asking for more. We would want to keep on hand about 2,500 rounds.

Senator HITCHCOCK. What have you for the seacoast guns?

AMMUNITION FOR ANTIAIRCRAFT GUNS.

Major MAXWELL. We have nothing that we would count as serviceable ammunition for the 3-inch antiaircraft guns.

Senator WADSWORTH. How much did you spend for that purpose last year?

Major MAXWELL. We are obligating \$25,000 for antiaircraft ammunition this year.

Senator LENROOT. How much have you spent? Have you any on hand of any amount?

Major MAXWELL. We have a lot of the components on hand, that we have had on hand for a long time, that are available for making up into complete rounds.

Senator LENROOT. You are not spending anything this fiscal year?

Major MAXWELL. No, sir.

Senator HITCHCOCK. Into complete ordnance? Those are things you can put in on short notice?

Major MAXWELL. Those are things that we can make up into complete rounds.

Major HARRIS. Of that current appropriation, \$25,000 will be expended on that project.

General WILLIAMS. The ammunition for the antiaircraft guns is a very difficult problem with us because of the fuse. The fuse operates through the burning of a powder time train of black powder. As you raise the elevation of the gun in the air, the rate of the burning of that time train varies, and likewise becomes more erratic, so that the problem of supplying a satisfactory time fuse for an aircraft gun is one of the most difficult things we have; that is one of the reasons why we are trying to develop a mechanical fuse, one that would not be subject to variation due to high altitudes and lessened air pressure.

Senator HITCHCOCK. We only have one 16-inch gun now on the Panama Canal?

General WILLIAMS. There is one gun down there, but there are others to go down, that are in process of manufacture.

Senator HITCHCOCK. What other guns besides 16-inch have they?

General WILLIAMS. They have a lot of 14-inch guns and 12-inch mortars, and so on.

Major SCHIMELFENIG. There are two of the 6-inch guns on pedestal mounts, four 6-inch guns on barbette mounts, ten 6-inch guns on disappearing carriages, ten 14-inch guns on disappearing carriages, one 16-inch gun on disappearing carriage, twenty-eight 12-inch mortars, and 33 antiaircraft guns.

Senator HITCHCOCK. The antiaircraft guns are 3-inch guns?

Major SCHIMELFENIG. Yes, sir. In addition to that, there are 46 of the 155-millimeter guns being shipped.

Senator HITCHCOCK. What caliber?

Major SCHIMELFENIG. 155-millimeter.

Senator LENROOT. I understand you to say what you will spend out of this year's appropriation will give you 2,500 rounds and the House appropriation will give you 5,700 more, making a total of 8,200; is that correct?

Major SCHIMELFENIG. Yes, sir.

Senator WADSWORTH. Is there anything else on that item? If not, take up the next item, General.

ALTERATION, MAINTENANCE, AND INSTALLATION OF SEACOAST ARTILLERY.

General WILLIAMS (reading):

For the alternation and maintenance and installation of the seacoast artillery, including the purchase and manufacture of machinery, tools, and materials necessary for the work, and expenses of civilian mechanics, \$55,000.

We estimated on that \$65,000 and the House allowed us \$55,000. Last year we had \$75,000.

Senator WADSWORTH. That is your repair item?

General WILLIAMS. Yes, sir.

Senator WADSWORTH. That does not seem like a very severe cut, General, does it?

General WILLIAMS. No, sir.

OFFICE OF THE CHIEF OF ORDNANCE.

Senator WADSWORTH. Now, we go to page 71, "Office of Chief of Ordnance."

DECREASE IN NUMBER OF CLERKS.

General WILLIAMS. We have at present on the rolls 141 employees. We estimated for the fiscal year 1923 for 127 employees, and the bill as passed has allowed 116, making a reduction of 11.

Senator WADSWORTH. Do you not think you can get along without that?

General WILLIAMS. No, sir; I do not think we can without pinching our activities beyond the point where we should.

Senator WADSWORTH. What was your pre-war office force?

General WILLIAMS. In 1916 we had 72. Of course, in 1917 and 1918 the number of employees was enormously increased on the different rolls.

Senator WADSWORTH. In 1917 you had 96 employees?

General WILLIAMS. In 1916 the number was 72. That would be the best figure.

Senator HITCHCOCK. What was the pre-war number?

General WILLIAMS. In 1913 we had 73; we had 73 in 1914 and 72 in 1915. In 1916 we had 72.

Senator HARRIS. Your work has increased, of course, a great deal.

General WILLIAMS. The work has enormously increased.

Senator WADSWORTH. This next item does not involve an appropriation. It is merely an authority to use, is it not?

General WILLIAMS. Yes, sir.

Senator WADSWORTH. The same issue comes up there that came up under the Signal Corps?

Major BROWNE. Yes, sir.

Senator WADSWORTH. And with the Engineer Corps?

Major BROWNE. Yes, sir.

General WILLIAMS. We estimated \$300,000 under that item for this year, and we would like to have \$300,000 allotted for 1923. Most of our drafting work is done here in the ordnance office in Washington, and is quite as active as it has been at any time heretofore, and it is because of this item that we are enabled to pay the draftsmen and engineers that we have got to have here at work in Washington, and we would like very much indeed to have that put back to what it was.

Senator WADSWORTH. Do you use it all each year?

General WILLIAMS. Yes, sir.

(Thereupon, at 4 o'clock p. m., the subcommittee adjourned until to-morrow, Saturday, April 8, 1922, at 10.30 o'clock a. m.)

WAR DEPARTMENT APPROPRIATION BILL, 1923.

SATURDAY, APRIL 8, 1922.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10.30 o'clock a. m.

Present: Senators Spencer, Jones of Washington, Lenroot, and Harris.

PRELIMINARY STATEMENT OF MAJ. F. W. BROWNE, UNITED STATES ARMY.

CONTINGENCIES OF THE ARMY.

Major BROWNE. Mr. Chairman, I should like to say just a word first to give the committee the setting of the first item to be discussed, "Contingencies of the Army," on page 4. The estimate submitted for contingencies of the Army was \$97,000. That is made up of three sections. That is, it provides for three distinct purposes: First, the contingent expenses proper of the department, for which it has stood for years; second, the activity of sales, the selling of surplus war property; and, third, the settling of war claims. The amount for each of the items is, respectively, for contingencies proper, \$30,000; for sales, \$56,000; for the settlement of claims, \$11,000; total, \$97,000. The House reduced the amount by \$2,000—that is, to \$95,000. The department is not disposed to ask for an increase over the amount allowed by the House. I do not suppose the committee wants to go into the contingencies proper.

Senator SPENCER. Not if there is no difference between you as to the amount.

Major BROWNE. Colonel Hull, the Acting Judge Advocate General, has charge of the claims activities and can discuss that matter, and Major Edgerton is the director of sales. If the committee desires to have him come up on that subject he is prepared to come.

Senator SPENCER. You are essentially agreed as to the amount which the House gave you?

Major BROWNE. Yes, sir; there is no question about the amount.

Senator SPENCER. There is no need of going into that, then.

STATEMENT OF COL. J. A. HULL, ACTING JUDGE ADVOCATE GENERAL, WAR DEPARTMENT.

CLAIMS.

Colonel HULL. I will speak first of the claims item, Senator, if you will permit me, under "Contingencies of the Army," page 4. It is a very small item—\$11,000, included in the \$67,000. At the time that estimate was made I expected that the claims work would be entirely

over, with the exception of foreign claims and a few inquiries. At first it was not intended to submit any estimate whatsoever. I am very glad now that I did.

Foreign relations will not be closed out until after December of 1923, in accordance with the agreement with France. We are maintaining an office in Paris—rents, requisition, and claims service—and keeping the records there to determine whether we shall pay France \$12,000,000 or \$18,000,000 under the French settlement. Consequently, an office will have to be maintained here, and that office costs only \$4,200 per annum.

The other estimates there were for file clerks and clerks to enable the Assistant Secretary to answer inquiries. They are coming in, even yet, at the rate of about 10 a day. Thirty-eight claims have been filed with the Court of Claims growing out of war claims since the first of the year. They, of course, involve a large sum of money.

Since that estimate has been made I have received a letter from Colonel Goff, which I should like to read to the committee, because so far no answer has been found to it on account of lack of appropriation:

MARCH 7, 1922.

Col. J. M. WAINWRIGHT,

Acting Secretary of War, Washington, D. C.

DEAR COLONEL: It has come to my attention recently that the War Department Claims Board and its various divisions have ceased functioning, and that the work is now being finally disposed of in the office of the Judge Advocate General. As you know, there are now in this department claims against the Derby Manufacturing Co. and the Bridgeport Brass Co., involving approximately \$1,700,000. As I understand the situation, there is only one person who is familiar with all the details of these two cases—Mr. E. F. Cassel, technical adviser on accounting matters to the claims board. If his services are terminated there will be absolutely no one in the Government service to take over these cases and handle them in the manner necessary. If there is any way in which he can be retained it will be a great convenience to this department. As a suggestion, there may be some provision which Congress can be persuaded to make in the current appropriation bills which will allow the claims board to continue to function, in skeleton form at least. If it were possible to have Mr. Cassel transferred to this department, I would gladly take the initiative, but at the present time there is absolutely no way in which that could be done.

I shall greatly appreciate any suggestions you may make looking to the retention of Mr. Cassel.

Cordially yours,

GUY D. GOFF,

Assistant to the Attorney General.

I regard Mr. Cassel as one of the most valuable employees of the Government. He is an expert accountant whom I have used for the last year and a half on all important claims matters. He has a fund of information that is remarkable, and he has been of the utmost assistance to the Government, and will continue to be of the greatest assistance if either the Department of Justice or the War Department can retain his services in connection with the larger claims, the auditing, and such matters. He is getting a salary now of \$5,000 a year.

Senator HARRIS. General, you want \$11,000 besides the \$67,000? Is that it?

Colonel HULL. No; the \$11,000 is included in the \$67,000, but prior to this letter I presumed Mr. Cassel would go to the Department of Justice, where much of his work will be during the next year.

Senator SPENCER. Is there any change that you suggest?

Colonel HULL. I am submitting this to the committee with a view of having you determine whether you want to raise that \$67,000 to \$72,000 to take care of Mr. Cassel.

Senator HARRIS. Do you recommend it?

Colonel HULL. I do strongly in view of Colonel Goff's letter. It was not contemplated at the time of the estimate.

Senator SPENCER. You mean that that will take \$5,000 a year additional?

Colonel HULL. Yes, sir; to take care of him.

Senator SPENCER. That is, it will raise the \$67,000 to \$72,000?

Colonel HULL. Yes, sir.

Senator SPENCER. Is there an estimate for that additional \$5,000?

Colonel HULL. I do not think there has been.

Major BROWNE. No, sir; there has been no estimate.

Senator SPENCER. You ought to get a supplemental estimate in on that.

Colonel HULL. Then I shall have to take it up with Colonel Goff and ask him to take care of it in the Department of Justice.

Senator SPENCER. Exactly.

Colonel HULL. I just wanted to submit it to the committee for their instructions.

Senator SPENCER. We are not bound by the Budget, but we like to comply with the Budget if we can.

Colonel HULL. I understand, sir.

OFFICE OF THE JUDGE ADVOCATE GENERAL.

SALARIES.

The other item I am interested in is the clerks in the Judge Advocate General's office. That estimate was made by my predecessor, and I inherited it. I might state, in general, that the work of the Judge Advocate General's office bears no relation to what it formerly had to do.

Senator HARRIS. What page is that?

Senator SPENCER. Page 14.

Colonel HULL. The new Articles of War, of course, throw an immense amount of work of review upon the office that formerly was not performed. The cleaning up of the war, the litigation following it, all comes to the office. Recently orders have been issued to reduce the commissioned personnel of the office to a point which the Secretary and the Deputy Chief of Staff realize is apt to be below the point of efficiency.

Senator SPENCER. The House cut you down on class 2 clerks from seven to five?

Colonel HULL. Yes, sir.

Senator SPENCER. And on class 1 clerks from 27 to 20?

Colonel HULL. Yes, sir.

Senator SPENCER. Can you not get along with that cut?

Colonel HULL. Not efficiently.

Senator SPENCER. I suppose the class 2 clerks are most needed?

Colonel HULL. They are all needed, Senator. I was going to say that the cutting down of the commissioned personnel throws an

added burden upon the office, and the office bears no relation to what it was as it existed before the war. We have the claims, the review of courts-martial, the patent section, and so on. The estimate for clerks in the patent section alone, which was thrown on the office this last year, is 25 per cent of the entire clerical force. I should like to submit for the record a letter from Mr. Daugherty to the Secretary of War, of February 14, in which he discusses the office in regard to the patent section.

Senator SPENCER. Yes; put it into the record. How does the number of clerical assistants compare with the pre-war condition?

Colonel HULL. There is no relation whatsoever. We are much larger to-day than we were.

Senator SPENCER. Because of the added work?

Colonel HULL. On account of the added work. This office is entirely different from the ordinary office. The functions of the office are entirely different from what they were prior to the war.

The letter to which I refer is as follows:

OFFICE OF THE ATTORNEY GENERAL,
Washington, D. C., February 14, 1922.

Hon. JOHN W. WEEKS,

Secretary of War, Washington, D. C.

DEAR MR. SECRETARY: I am informed that the suggestion has been made that duplication of the work of this department is involved in the provision in the Judge Advocate General's office of your department of the section for facilitating the furnishing of information to assist in the defense of Government suits. I refer particularly to the operation of the patent branch of that office. I understand it has been suggested that the duties of that branch may more properly be allocated to this department. That branch, as I am informed, has charge of the protection of the War Department's interests in inventions and in the securing of letters-patent therefor, as well as of the accumulation of evidence available in your department to assist in the defense of the United States.

The work of the patent branch of the Judge Advocate General's office in your department has already demonstrated its value in the accumulation of evidence for the defense of the Government in patent litigation. This litigation, running already into claims for some hundreds of millions of dollars, may result disastrously to the Government if neglected, but if fully defended will probably result in minimum recoveries against the United States. While this department takes active charge of the defense of these cases, it is obvious that it is dependent on your department in cases originating there for full presentation of the facts, and that full access to the facts necessary for the defense can be best had by officers of your department who are acquainted with its records and who possess the necessary authority to obtain them. To call upon this department for investigation work in the War Department would involve a very large increase of the force of the Department of Justice, with the achievement of relatively inferior results.

As to the turning over to this department of the protection of the inventions in which the War Department is interested, this would involve an increase of the technical staff of this department out of all proportion to any value to be gained by such change. I am informed that the inventions referred to have been largely developed by the technical officers of your department, and for their best protection in the interests of the United States it seems to me that the employment of your own technical staff is the obvious solution. This department, of course, being available at all times for the taking up of any litigation or legal questions involved.

With the departments and bureaus of the Government, who have not developed a staff for carrying on this branch of Government activity, the patent branch of this department is compelled to give a larger share of its assistance, because in such cases it does not seem profitable to take any other course. In your department, however, the interests are so large that, wisely as I think, a highly efficient force has been developed by you within your own department, and I take this occasion to put of record my high appreciation of the

assistance that is being rendered to the Department of Justice and to the people by the Judge Advocate General office under your administration.

What I have said above applies to other executive departments which have established their own patent branches, and applies with force proportioned to the extent of the patent business in those departments.

Respectfully,

H. M. DAUGHERTY,
Attorney General.

Senator LENROOT. Are you making any request here?

Colonel HULL. No; except to restore the original estimate, which was a minimum estimate.

Senator LENROOT. What are you getting this year? The estimate was an increase over what you now have.

Colonel HULL. Out of all the different rolls, Senator, we are getting over \$75,000, and in addition we are borrowing clerks for the patent section, which is to be taken care of. The patent section has been in the office of the Assistant Secretary.

Senator HARRIS. It will cripple your work, General, you think, if these clerks are taken away from you?

Colonel HULL. I do think so, sir. The \$11,000 that is involved is a very small item, but we are handling such huge matters in the Court of Claims and in the other courts that I would not ask for it in view of the smallness of the item, if it were not that the results would be so important to the Government.

Senator HARRIS. You want how much more?

Colonel HULL. I should like to have the matter returned to the original estimate of the office, \$64,250, which was, I think, if anything, too conservative an estimate. If it had been made by me, I should have made a larger estimate. When I was in the War College, Colonel Morrow and myself, the two senior colonels were sent through the office to make an investigation and report to the War College. We found a condition there that as a business man or as a lawyer in civil life I would not have maintained. We had an overhead there of more officers in proportion to clerks than I thought was economical.

Senator LENROOT. For this year you had, under this paragraph, \$60,740?

Colonel HULL. Yes, sir; and then they also had temporary employees, and they also had some employees that were attached to the patent section, borrowed from other offices and assigned to the Assistant Secretary's office. The patent section has recently been turned over to this office.

Senator LENROOT. Can you tell us how much you will actually expend for this fiscal year under this paragraph?

Colonel HULL. The chief clerk, the last time I inquired about that, told me that there will not be over a couple of hundred dollars turned in at the end of the year unless there is further elimination.

Senator LENROOT. My question was as to the total amount. You said you expended \$60,740, and then something in addition?

Colonel HULL. We expended \$60,740 out of our appropriation, and then there was the lump-sum roll from which we had a number of clerks, and then we borrowed some clerks from the patent section and from the other offices; so I should say that the total appropriations were in the neighborhood of \$80,000 for the current year.

Senator HARRIS. You think you can get through on \$64,250, do you?

Colonel HULL. I will have to, but it will be tight sledding.

**STATEMENT OF MAJ. GEN. MASON M. PATRICK, CHIEF OF THE
AIR SERVICE.****OFFICE OF THE CHIEF OF AIR SERVICE.****SALARIES—CIVILIAN EMPLOYEES.**

General PATRICK. Mr. Chairman, the item I wish to bring to your attention is the amount to be appropriated for the payment of the civilian employees in the office of the Air Service.

Senator LENROOT. Have you any suggestions to make?

General PATRICK. I have certain suggestions I should like to present to your committee.

For the current fiscal year my office was allowed \$350,000 for clerical assistance, and in addition it was allowed \$65,000 for technical assistance. The \$65,000 was taken out of all of the other items of the appropriation. It was not a specific appropriation itself—merely an authorization. I have endeavored to carry on the work as economically as possible.

Senator LENROOT. Let me understand: For this item you say you have how much?

General PATRICK. For the current fiscal year I was allowed \$350,000, and I had an authorization of \$65,000 in addition.

Senator HARRIS. Have you used both sums?

General PATRICK. I have not used all of both sums, sir. I have endeavored to carry on the office as economically as I can. We will turn in this year about \$16,000, I think, from the \$350,000.

Senator HARRIS. How much did you ask for for the next year, General?

General PATRICK. The Director of the Budget authorized us to ask for \$210,770. The House committee gave us \$195,720—in other words, a cut of about \$15,000—and I make a very earnest plea to have the total amount that the Budget Director authorized appropriated for this purpose.

Senator LENROOT. I should like to get those figures correct. The revised estimate would seem to amount to \$213,120. The House seems to have cut that \$17,450.

General PATRICK. There seems to be some error there, Senator. That is a mistake, I think. The cut was only from \$210,770 to \$195,720.

Senator LENROOT. That is evidently an error in the House report.

General PATRICK. I had not seen this statement before, so I had only my own figures to go by.

Senator LENROOT. You are inclined to think that is correct, are you—\$213,120?

General PATRICK. No, sir; I am quite sure the Budget figure was \$210,770.

Senator LENROOT. What are the omissions?

General PATRICK. They omitted one clerk at \$2,400; I had asked for three. They gave me a chief clerk at \$2,400. They allowed me one so-called principal clerk at \$2,400, where I had asked for two. They allowed two at \$2,250 where I had asked for three, and they allowed two at \$2,000 where I had asked for three. Then their next cut came in clerks of class 1, where they allowed only 80 where I had asked for 87.

Senator LENROOT. What have you to say as to the necessity of those clerks that have been omitted by the House?

General PATRICK. My office deals not alone with operations, training, and the like; but it is also a supply office. I have to do an immense amount of work in connection with the supply of the Air Service. It is an entirely new branch. We have to supply over 150,000 different items, many of them complicated and highly technical, and it is absolutely necessary, in my opinion, in order to carry on the office efficiently, that I shall have a proper number of clerks. The disposal of surplus property is another enormous task in the Air Service. I am doing it, and we are getting rid of it as fast as we possibly can. It is returning a sum much in excess of that which it costs to dispose of it, and when this work is finished I can effect a very substantial saving.

Senator LENROOT. When will that be completed?

General PATRICK. I hope to finish it, Senator, within the next fiscal year; but in order to do it I must have the necessary assistance. The current work in the office is well up to date, except that particular part of it which deals with supply and the disposal of surplus property. There I am behind, and besides there are certain requirements for future operations that I am called upon to determine, and that is taking the time of some of the clerical force. I ask for so small an increase that I hope it will be possible at least to restore this Budget figure.

Senator LENROOT. To what extent, General, did the House reduce the aggregate appropriation for the Air Service? Do you know?

General PATRICK. I have the figures right here somewhere. They reduced it from \$15,000,000 down to \$12,431,000. That is a decrease of \$2,570,000, in round numbers.

Senator LENROOT. If some of that decrease should stand, would that effect this item?

General PATRICK. That really would affect this item scarcely at all, Senator. A considerable part of the decrease is for work out at Dayton, Ohio, where I have my experimental plant; and this does not lessen the amount of work to be done in my office here in Washington.

I should like to say, sir, if I may, that we were allowed for this year, as I stated, \$350,000 for the clerical force in my office.

Senator HARRIS. Besides an additional sum?

General PATRICK. Besides an additional sum; but that was just for the clerical force in my office, and I have tried to spend it as economically as I can. We are spending now at the rate of \$324,000 a year. We will turn in about \$16,000 this year. The decrease that the Budget imposed, down to \$210,000, was a cut of about 40 per cent, I think; and I should like to point out also the number of employees that I had in my office the 1st of January, 1921, just a little more than a year ago. We then had 668 employees in the office. The House bill, as now drawn, will allow me only 149, which is only 22.3 per cent of what I had a little more than a year ago. We have been consistently reducing, and endeavoring to carry on the work as economically as we possibly can; but the work must be done, and unless I am allowed a sufficient force I shall have to neglect a certain part of it.

One thing particularly important, I think, is that the House bill would cause demotions of at least six of the clerks in my office who have had anywhere from 10 to 25 years in the Government service, and all of whom occupy really very important positions. As I stated before the House committee, I have been endeavoring to give to my chief clerk and to my principal clerks a great deal of authority. I hold them responsible for the civilian employees in the office. Upon the chief clerk rests the responsibility for all the distribution of the clerical force, for all promotions and demotions, all changes; and he has done well, and has earned every cent that is provided for him. The other clerks at these salaries higher than \$1,800 are supervisors. They are in charge of a number of clerks under them. They are doing important work, and I am satisfied from my own personal knowledge that they are earning the money that they are now paid; and it would be a great misfortune, in my opinion, to have to cut them down as provided in the House bill.

In reference to the amount that I am allowed to expend for technical services, as I stated a few moments ago, there are a great many technical matters that have to be handled in my own office. There is no other place where it is possible to do this work. A year ago I had 59 of these technical employees. That number has been reduced to 26. When I appeared before the House committee I asked to have the same number for next year—26—and in my testimony I went into the duties that were performed by each one of them. They are men who are particularly skilled in their specialties. They have saved the Government many thousands of dollars by the knowledge that has been available, and it is absolutely essential for the supply work and other technical work in my office that I shall have the services of these men. The House did not question that, and they gave me \$65,000.

Senator LENROOT. Just what you had last year and what you asked?

General PATRICK. I had \$65,000 last year. I am asking your committee, on account of conditions that have arisen since my hearing before the House committee, to authorize me merely to spend \$25,000 more. That is not an increase in the appropriation at all. It is merely an authorization. Instead of having certain men on the field roll, it is an authorization for me to spend that much more for men in my own office. I shall have to have these men anyhow. What I am asking for is 10 employees whose average salary will be about \$2,500 a year.

We undertook to do a great deal of accounting of war-time contracts. Very shortly after the armistice, in order that private industry might be rehabilitated, the War Department made some very hasty settlements with a number of concerns with which they had contracts for Air Service material. It was carefully provided in the contracts that for some period of years after the war was over we should have the right to reopen these books, to go into them, examine them, and see just exactly what had happened; so they hastily made these settlements. They said, "Go ahead and get back to work again, and then later we may investigate and find out whether we paid you too much or too little."

A very cursory examination indicated to my office and myself that there had been quite substantial overpayments. We have not in-

fringed at all upon the work of the Finance Department; but with their thorough accord and entirely with their sanction we have carried on these audits, and already we have succeeded in getting back from certain concerns about \$275,806. That has actually been paid in. We have forwarded recommendations to the Department of Justice to institute suits to recover overpayments totaling \$17,490,000 that we have absolutely established as overpaid. There are other audits that we are now undertaking, and it is as certain as anything can be that the total of these overpayments will amount to \$30,000,000 and more, with the probability that the Government will recover that sum.

In order that we may complete that work, I need during the coming year these 10 men. I am going to carry them anyhow, whether you increase this allotment in my office or not. They will be carried out of the appropriation. It is a mere question of whether they will work in Washington or whether they will work somewhere else. If they work somewhere else, I shall have to bring them to Washington occasionally.

Senator LENROO. What appropriation will that come out of?

General PATRICK. Out of the appropriation for civilian employees elsewhere than in my own office—the field roll, as we call it.

Senator HARRIS. It would be economy to have them working in your own office, would it not?

General PATRICK. I am going to show that. If I have to send for them to come here, they are paid a per diem and traveling expenses. If they can work here, I will save \$5,000, in round numbers. That is the sole thing that is involved.

Senator LENROO. These men are auditors?

General PATRICK. They are accountants and auditors who are working on this particular work, which is returning large sums to the United States.

Senator HARRIS. You want that \$65,000—

General PATRICK. I want it made \$90,000, merely as an authorization, with the understanding that there is no increase in the appropriation at all.

I have here a suggested amendment to the House bill which I should like to submit to your committee, if I may, Senator, which covers that feature of it and shows the clerks I am asking for above and this authorization below. If I may, I should like to hand that to your stenographer and have him incorporate it in the hearings.

Senator LENROO. Yes; you may do that.

(The proposed amendment is as follows:)

(Change recommended in H. R. 10871, page 53, line 12, to page 54, line 4. Wording to be inserted is underlined; wording to be omitted is lined out:

“OFFICE, OF THE CHIEF OF AIR SERVICE.

“Salaries: Chief clerk, \$2,400; principal clerks—~~one~~ two at \$2,400 each, two ~~three~~ at \$2,250 each, ~~two~~ three at \$2,000 each; clerks—six of class four, ten of class three, thirty-eight of class two, ~~eighty~~ eighty-seven of class one; addressograph operator, \$900; messengers—two at \$840 each, two ~~four~~ at \$720 each; two messenger boys, at \$180 each; two laborers, at \$720 each; in all, ~~\$195,720~~ \$210,770.

“The services of aeronautical engineers, skilled draftsmen, and such other technical and other services as the Secretary of War may deem necessary may be employed only in the office of the Chief of Air Service to carry into effect the various appropriations for aeronautical purposes, to be paid from such appropriations, in addition

to the foregoing employees appropriated for in the office of the Chief of Air Service: *Provided*, That the entire expenditure for this purpose for the fiscal year 1923 shall not exceed \$65,000 \$90,000, and the Secretary of War shall each year in the annual estimates report to Congress the number of persons so employed, their duties, and the amount paid to each."

General PATRICK. Unless you wish to ask something, I have nothing else to submit, sir.

I should like to say just one word more—that I am trying to carry on my office very economically. I am doing the best I can. There is a certain amount of work to do. It has to be done in a businesslike way, and if I am reduced as provided here I shall have to leave some of it undone.

Thank you, gentlemen.

Major BROWNE. The next item is on page 73—General Phillips, of the National Board for Promotion of Rifle Practice.

**STATEMENT OF GEN. FRED H. PHILLIPS, JR., EXECUTIVE OFFICER
OF THE NATIONAL BOARD FOR PROMOTION OF RIFLE PRACTICE.**

RIFLE PRACTICE.

Senator LENROOT. Have you some suggestions on this paragraph?

General PHILLIPS. There are three items under that heading. I should like very much to have the first item and the third item combined.

Senator LENROOT. Just designate those items. That is the \$89,900?

General PHILLIPS. Yes, sir; and the \$100. I may be mistaken, but I think the other item is \$100.

Senator LENROOT. You want the third and the first items combined?

General PHILLIPS. Yes, sir.

Senator LENROOT. State your reasons.

General PHILLIPS. This item was first placed in the Army appropriation bill for the fiscal year 1917 by the House committee to carry out the provisions of section 113 of the national defense act, and at that time the legislation was in one paragraph. Later—next year, I believe—in submitting the estimate the War Department divided it, because the funds were handled by two departments, the Ordnance Department and the Quartermaster Corps. Since that time the handling of the fund has been turned over to the office of the Assistant Secretary of War, and there is not a necessity for dividing it into two departments. I believe we can work better if it is combined.

Senator LENROOT. What have you in mind by way of combination? What will be accomplished by the combination?

General PHILLIPS. In carrying on our activities, sometimes we may need a little something in the way of ordnance material for which only \$100 is available, or we may not need as much quartermaster material, for which \$89,000 is available. It makes the fund more elastic if we can use it for the necessary purpose of carrying on the work.

Senator JONES of Washington. Do you think it will result in economy?

General PHILLIPS. I believe so; yes, sir.

Senator LENROOT. Why do you say that? There is practically no appropriation at all estimated for that purpose. This \$100 is merely to keep the item alive.

General PHILLIPS. Yes, sir.

Senator LENROOT. Is it your position that money should be appropriated for this item, and that you will get it by combination where you would not otherwise?

General PHILLIPS. Not necessarily at this time. For instance, we are in a position now where we have to send a team to compete in the international matches in Spain. Our team went over last year and competed in France, and we defeated the Swiss. That is the first time the Swiss have been defeated in 18 years. We brought back these trophies. A young man on our team won the championship of the world. They must go back to defend those titles. We are in a position now where we can not do anything for the development of a special rifle that has to be used in these rifle matches. Last year we had a rifle that we had made up to specifications in about three weeks, and the people over there thought nothing of it until after we had put over this winning team, and then they measured our rifle, took all the data with reference to it, and propose to make theirs as good, if not better. We have to do the same. We have not any funds at all with which to handle that matter.

Senator HARRIS. General Phillips, will you please tell me briefly just what you have done in this work in the past year, just how you have spent this money? I am not familiar with the work, and I should like to know. In the first place, how much is the overhead on this item? How much was spent for the office in Washington?

General PHILLIPS. About \$22,000 will be spent here.

Senator HARRIS. How is the rest of the money spent?

General PHILLIPS. \$60,000 of it was expended in connection with the national matches last year. There was an attendance of 30 teams from as many States.

Senator HARRIS. Where were those matches held?

General PHILLIPS. The matches were held at Camp Perry, Ohio.

Senator HARRIS. Just the one match?

General PHILLIPS. That is known as the National Match.

Senator HARRIS. They were held there for some days at a time?

General PHILLIPS. Yes, sir; about a 26-day period. First there is a period of instruction, and then the matches are shot after that. We send these representatives of the different States up there. They are selected by the governor of the State to represent the State. They have a period of instruction, and participate in the national matches in connection with the National Guard organization and organizations of the service.

Senator JONES of Washington. Do you pay all their expenses?

General PHILLIPS. We pay their travel expenses and subsistence; we furnish them the use of arms and ammunition; but we do not furnish them clothing, or shoes, or anything of that kind, as is done in other civilian military-training camps. They have their own shooting clothes. We loan them the use of camp equipage while there.

Senator HARRIS. Is this confined to the National Guard?

General PHILLIPS. No; this school of instruction has teams from the Navy, the Marine Corps, and the Army, and out of this appropriation we take care of some representatives of the different R. O. T. C. training camps, and civilian teams that are selected by the States.

Senator HARRIS. How much did you spend in sending our men abroad? Did that come out of this fund?

General PHILLIPS. Yes, sir. The amount spent was about, I judge, \$900. The team last year was composed of officers and enlisted men from the Marine Corps and the Navy and the Army. Expenses of two members of the team only came under this appropriation. One of them was strictly a civilian. The other man happened to be in the National Guard, but no National Guard appropriation was available to send him as a National Guard man and we sent him as a civilian. The civilian was the one who won the championship of the world. They traveled on Government vessels. This year the matches will be held in September, when the transport services will be suspended. Last year they went over on a battleship and came back on a transport.

Senator HARRIS. How many men were there at Camp Perry in their meet last year? How many men participated?

General PHILLIPS. About 1,100. Last year's appropriation for these three items amounted to about \$110,000. The Director of the Budget reserved from that about \$16,500, and the expenditure amounted to an average of 85 cents per man in the United States that was interested and instructed in rifle shooting. During the same period of time these same men bought from the Government obsolete rifles and ammunition to the amount of \$114,000; so that against \$94,000 that was expended on them they returned to the Treasury \$114,000 for obsolete material.

Senator LENROOT. What you really desire, General, I gather from the House hearing, is to have this combined so that you can purchase .22-long cartridges, for which rifles are now being made?

General PHILLIPS. We could not purchase any of those with this amount of money.

Senator LENROOT. You could not?

General PHILLIPS. No, sir.

Senator LENROOT. So there would be no object in combining them?

General PHILLIPS. Except to take care of an incident like this one I mentioned, with this amount of money.

Major BROWNE. The principal object of this, I think, if I may say so, is to simplify the accounting and bookkeeping, and possibly to render the administration of the appropriation a little more flexible for the department, and perhaps make it a little easier for the committee to determine on the amounts which they see fit to appropriate. It is a logical thing to have the activity provided for in one item, as it is all for a single purpose.

Senator LENROOT. Is there anything further?

General PHILLIPS. In 1917 your appropriation for this activity amounted to \$370,000. The paragraph carried an authorization of \$60,000 for transportation of teams separate from the other, and now the transportation expenses having been increased by reason of increased railroad rates, \$80,000 being made available for that purpose, there is about \$20,000 as against what was before \$310,000, and if this appropriation is carried through we shall have to limit the number of teams that will participate in the match by some regulation of the Secretary of War. We can not take care of all of them. The work of small-bore shooting will have to be carried

on until Congress sees fit to make an appropriation for that purpose by continuing to allow these men to buy their own ammunition.

Senator LENROOT. Was the \$85,000 that you were permitted to spend \$85,000 in the aggregate or \$85,000 out of this \$100,000 appropriation? In other words, are you spending \$85,000 or \$95,000 this year?

General PHILLIPS. We are spending \$85,000 of one appropriation.

Senator LENROOT. And \$10,000 of the other?

General PHILLIPS. They took \$1,500 out of that.

Senator LENROOT. So you are expending, then, about \$94,000?

General PHILLIPS. About \$94,000; yes, sir.

Senator LENROOT. And this appropriation gives you \$99,900—practically \$100,000?

NATIONAL TROPHY AND MEDALS FOR RIFLE CONTESTS.

General PHILLIPS. Yes, sir; but when they took that \$1,500 away from us, although we were obligated that time to give a certain trophy for certain matches, last year the trophy could not be purchased. It was won, but it has not been delivered.

Senator HARRIS. How many of these trophies are there, and what is the expense of them?

General PHILLIPS. We have three national match trophies now. There should be four.

Senator HARRIS. \$10,000 is appropriated for those trophies?

General PHILLIPS. \$10,000 is appropriated for the purpose of providing those trophies; and during the matches we give badges, and medals, and qualification badges, and things of that kind.

Senator LENROOT. What does the trophy cost?

General PHILLIPS. It just depends upon what value you wish to put into it, sir.

Senator LENROOT. What are you actually expending? How will they run?

General PHILLIPS. We expended during the past year about \$15,000 for badges and trophies.

Senator LENROOT. No; the language is, "For the purpose of furnishing a national trophy and medals." What does the trophy cost?

General PHILLIPS. We have a trophy.

Senator LENROOT. I see. That has been bought and paid for?

General PHILLIPS. That has been bought and paid for. Then we have two other trophies that go in the same match, the team match, and those were given to the Government by the National Rifle Association. We have a pistol trophy that is given in these matches. That trophy was given to the Government by the A. E. F. team that won the pistol match in Paris just at the end of the war; and then, out of that fund, we provided medals that go with these different matches.

Senator LENROOT. This fund, then, does not pay for trophies, but for medals and other minor matters?

General PHILLIPS. We expected it to pay for the trophy that was awarded at the intercollegiate match which was made a part of the match of last year.

Senator LENROOT. How much do you want to spend for that? I am trying to get the cost of these trophies.

General PHILLIPS. It ought to cost at least \$1,000.

Senator LENROOT. That is what I am getting at.

General PHILLIPS. The second trophy needs repair, and the estimate we have had on repairing that was \$900.

Senator HARRIS. What do you pay for the medals?

General PHILLIPS. They cost from about \$30 down to \$2.50, depending on whether they are gold, silver, or bronze.

Senator JONES of Washington. You spoke of a \$1,500 trophy that you could not deliver.

General PHILLIPS. They took \$1,500 from this fund.

Senator JONES of Washington. From the \$10,000 fund?

General PHILLIPS. Yes, sir; that we expected to devote to the purchase of a trophy.

Senator JONES of Washington. Why could you not spend it?

General PHILLIPS. Because they took it away from us.

Senator JONES of Washington. Who took it away?

General PHILLIPS. The Director of the Budget.

Senator JONES of Washington. They did not take away the appropriation that we had already made, did they?

General PHILLIPS. Well, they did do it.

Major BROWNE. I should like to say that that action was taken by the Secretary of War. Of course, in no case did the Director of the Budget take funds away from the War Department.

Senator JONES of Washington. What did the Secretary do with that money?

Major BROWNE. He simply set it aside, and reported it to the Director of the Budget as an amount which he expected and hoped to save, and ultimately return to the Treasury. He withheld it from availability for expenditure.

Senator JONES of Washington. That is, you had an appropriation of \$10,000 for buying trophies, etc.; you obligated yourselves to furnish a trophy at a cost of about \$1,500, and that was contested for; but before you turned it over the Secretary of War took \$1,500 of that money and practically put it into the Treasury, and would not allow you to spend it for that purpose?

General PHILLIPS. Yes, sir.

Senator JONES of Washington. That puts the Government in a rather embarrassing attitude.

Senator LENROOT. When was that trophy obligated?

General PHILLIPS. It was obligated by the order that was issued for the conduct of the match in March of last year, and then the funds were withdrawn in July. The match was shot in September.

Senator JONES of Washington. The match was shot after the money had been diverted.

General PHILLIPS. Yes, sir.

Senator JONES of Washington. But I suppose the people who entered into the match did not know anything about that?

General PHILLIPS. No, sir. It was won by the Naval Academy.

Senator LENROOT. Will you buy that trophy out of this fund for next year?

General PHILLIPS. If they do not take it away again.

Senator LENROOT. I mean out of the appropriation, presumably?

General PHILLIPS. If they make a \$10,000 appropriation and leave it available for the purpose, we will certainly obtain the trophy and deliver it.

Senator LENROOT. That is what I want to know.

Senator JONES of Washington. That is, you will obtain the trophy that you obligated for the current year?

General PHILLIPS. Yes, sir.

Senator JONES of Washington. Or for last year. It was not for the current year, was it?

General PHILLIPS. It was for last year. This trophy is perpetual, you know. It is competed for annually.

Senator JONES of Washington. Yes, I know; but as you did not get it, do you think you can take part of that money and go back and get a trophy that you promised but did not get? It seems to me that it would be for a trophy hereafter.

Senator LENROOT. They can still get it, and it will be shot for next time.

General PHILLIPS. It will be shot for next time. We simply put the record on the trophy as having been won such and such a year.

Major BROWNE. I think possibly there is some misunderstanding in regard to the financial status of this appropriation. The books of the Chief of Finance as of February 28 shows an unobligated balance of over \$1,500 now available for expenditure. That is in addition to this amount that has been set aside.

Senator JONES of Washington. Why do you not use that for the purchase of this trophy that you promised?

General PHILLIPS. Because that has to be used for the badges and medals that we give in these matches.

Senator JONES of Washington. I thought that was under this trophy appropriation.

General PHILLIPS. It is; but this fund carries trophies and medals.

Senator LENROOT. You will get before the end of this fiscal year the medals that will be issued in the next contest?

General PHILLIPS. No; the medals are being obtained now.

Senator LENROOT. I say, you will get them during the present fiscal year for issuance next year?

General PHILLIPS. No; we conduct matches all along as a method of promoting rifle practice. We are conducting gallery matches right now, known as the intercollegiate matches, civilian team matches, military matches, and also conducting the matches for the R. O. T. C. schools. There are 97 schools in competition now, for which we are conducting matches, and those schools represent the choice by the corps area commander of teams that participated in preliminary matches. He selects one for each three teams that participated in the preliminary matches and puts them in this intercollegiate match. In their preliminary matches they had about 300 teams competing. Now we are conducting this national intercollegiate match.

Senator LENROOT. When do you get these medals? Do you get them under contract?

General PHILLIPS. Oh, yes, sir.

Senator LENROOT. Do you not make a contract for the year?

General PHILLIPS. No, sir; we do not make a contract for the year. We make the contract for them as we need them. As the conditions of the match are drawn up, and stipulate how many medals are required, etc., then we get them.

Senator LENROOT. That is, then, you are spending money or obligating money each month under this item?

General PHILLIPS. Yes, sir. The medals are already under contract.

Senator LENROOT. Is it your understanding that the \$1,500 unobligated in February will be expended, aside from this obligated trophy, before the 1st of July?

General PHILLIPS. Yes, sir; the medals are coming through now.

Major BROWNE. Those are all the services that we have to-day.

(Thereupon, at 11.30 o'clock a. m., the subcommittee adjourned until Monday, April 10, 1922, at 10.30 o'clock a. m.)

WAR DEPARTMENT APPROPRIATION BILL, 1923.

MONDAY, APRIL 10, 1922.

UNITED STATES SENATE.
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10.30 o'clock a. m.

Present: Senators Wadsworth (chairman), Spencer, Lenroot, Hitchcock, and Harris.

NATIONAL HOME FOR DISABLED VOLUNTEER SOLDIERS.

STATEMENT OF GEN. GEORGE H. WOOD, PRESIDENT OF THE NATIONAL HOME FOR DISABLED VOLUNTEER SOLDIERS, AND COL. C. W. WADSWORTH, GENERAL TREASURER OF THE NATIONAL HOME FOR DISABLED VOLUNTEER SOLDIERS.

GENERAL STATEMENT.

General Wood. Mr. Chairman, before we go into the proposition of specific items contained in our bill, I should like to call attention to an item on page 126, beginning at line 21, that limits the moneys allotted from the Veterans' Bureau to certain specific items in our appropriation. Colonel Wadsworth, our general treasurer, has the entire correspondence in regard to this matter, including our letter to the Budget Commissioner last September, and I will ask him to make a specific statement showing the facts in the case, so that we can take it up for discussion.

Senator WADSWORTH. All right, Colonel; go ahead.

Colonel WADSWORTH. Mr. Chairman, under the law the board of managers presented an estimate for the maintenance and support of the National Home. Under the organic act the appropriations are required to be made separately for each branch of the home, and under certain prescribed heads of appropriation for each branch of the home; so that the estimates are submitted and the appropriation is made in a great deal of detail for each particular branch. These heads of appropriation comprise current expenses, subsistence, household, hospital, repairs, transportation, and farm for each one of the 10 branches of the home. Then there is a general appropriation for clothing for all branches of the home, and an appropriation for the support of the headquarters office.

We submitted in the regular course our estimates for the support of the home for the year 1923, which were intended to cover the entire maintenance of the home; this without regard to or expectation of getting funds from any other source than the direct appropriation. When the matter came to the Budget officer our attention was called to the provision made in previous appropriation acts charging

the Veterans' Bureau with the responsibility of hospitalizing all beneficiaries of that bureau, and we were asked whether or not we had made any provision for obtaining any part of our maintenance cost from that source. Our reply was in the negative.

Thereupon, as a result of a conference with General Lord and others of the Budget officer's office, it was suggested that we apportion the probable expenditures for 1923 to the soldiers' home appropriation proper and to a pro rata part that might be charged against the Veterans' Bureau in proportion to the number of beneficiaries of the World War that we would maintain at the several branches. This was done by a letter, copy of which is found in the hearings before the House on page 332. The effect of this letter was to make a reduction at the several branches of the home where beneficiaries of the Bureau of War Risk are maintained under each of the several heads of expenditure in percentages ranging from 10 per cent at some branches to 50 per cent at others, each branch being apportioned in accordance with the number of beneficiaries of the Bureau of War Risk compared to the whole number it was expected would be maintained at that particular branch. The amount that was reduced from our appropriation was immediately submitted to the director of the bureau as an item on which we would call upon him for reimbursement, and it met with the approval of the Budget officers at the moment. They passed on to the House our estimates as scaled, with certain further scalings. They also eliminated from our estimates the amount that has since been covered as a bonus or increased compensation that is carried in another and different bill; so that the result is—

Senator WADSWORTH (interposing). Just a moment. What do you refer to as the bonus or increased compensation?

Colonel WADSWORTH. In the legislative act for the last two years there was a provision for paying 60 per cent bonus, provided that did not amount to more than \$20 per month, on all employees.

Senator WADSWORTH. For your civil employees?

Colonel WADSWORTH. The home participates in that; and in making our schedules for next year we had expected that we would not be able to operate on a less figure than the gross sum that we are paying employees to-day—that is, if that bonus did not pass that would have to be covered in our direct appropriation—so that our original estimate submitted took no account of the probability of getting a bonus; but the Budget eliminated that and it was passed on to the House committee with that eliminated and with the reduction on all of these items of the percentage that we expected to obtain from the Veterans' Bureau.

PROHIBITION AGAINST USE OF VETERANS' BUREAU ALLOTMENTS.

When the House took up consideration of this matter it was thoroughly discussed, and it was thought that it was thoroughly understood that our estimates as the House was considering them contemplated our getting this additional money from the Veterans' Bureau, but the bill as passed by the House contains a provision, to which General Wood has referred, that prohibits the use of a reimbursement from that source under three of our heads of expenditure—current expenses, farm, and repairs. The effect of that, sir, if this

bill should pass in its present form, would be that we would be allowed to provide only half of the amount that would be required under these several heads at some of the branches and varying proportions at other branches down to about 10 per cent that would be short, but it would be short at every branch of the home where beneficiaries of the Veterans' Bureau are to be cared for. We could not possibly operate under that.

"Current expenses" covers, as is shown there, the wages and salaries and overhead charges for running the branch homes. It is less variable than any other head of appropriation that we have. As you know, the overhead charges do not respond to an increased or decreased membership like subsistence, like clothing, or like some item that has a specific and direct relation to the numbers cared for.

It takes as many officers and guards and as much stationery and as many telegrams, and we do the same business transactions and require practically the same personnel to handle the records and overhead charges for 2,000 members as we would for 2,500 or for 1,500. I should say that we would not even add another clerk under "current expenses" on a fluctuation of 500 members either way, because that is fixed and not subject to much fluctuation. We have to have the same complement of officers and the same complement of clerks to carry on with a smaller or a slightly increased membership, so we would not be able to operate at all with this provision in the bill unless we could get the money that has been cut off from the estimates as we submitted them.

Senator WADSWORTH. You submitted in your estimates an item for current expenses in each one of the 10 homes reduced, purposely so, on the theory that you would receive a certain additional sum for that particular class of expenditure from the Veterans' Bureau?

Colonel WADSWORTH. Exactly, sir. That is the situation exactly.

Senator WADSWORTH. Now, the House has forbidden you to take any money from the Veterans' Bureau for that purpose?

Colonel WADSWORTH. Yes, sir.

Senator SPENCER. Why did they make that applicable only to those three items, and not to the others?

Colonel WADSWORTH. We have no explanation whatever of that, sir. If you will turn to the hearings on page 330, where we were discussing this matter before the House committee, you will see that we covered this exact situation, and that Mr. Anthony's statement there indicated that they had a complete understanding of the situation, and he assures me that they will bear it in mind. You will find it about midway of the page.

Wereceived notice of this bill only a few days since, as the president of the board and the general secretary had been absent in the West, and the bill passed during our absence, and we did not know that it was reported differently. This is the first opportunity we have had to take up the matter, and we had no chance to take it up in the House before it was finally passed.

General WOOD. Senator, I think I might possibly explain the ratiocination of the case. The three times which are not in this prohibitive clause on page 126—

Senator SPENCER (interposing). You mean the three which are?

General WOOD. No; the three which are not.

Senator SPENCER. There are more than three items which are not in it.

General WOOD. No; transportation is a small item which does not amount to much, but there are three large items which are prohibited and three which are not. The first of the three which are not prohibited is subsistence, including all food supplies, which apparently would be directly affected by a change in the number of membership; the second is hospital, and the third is household. There are three items which probably the House committee thought would be directly affected by a fluctuation in membership, and they very properly came to the conclusion that current expenses would not be much affected by fluctuation. The farm, which includes our roads and things of that kind, would not be much affected by fluctuation, and the same thing would apply largely to repairs.

Senator SPENCER. Do you not get your supplies largely from the farm?

General WOOD. I might say, Mr. Senator, that the heading "Farm" is a very misleading heading. If you will look on page 120 you will find that "farm" not only includes farm but it includes roads and walks and cemeteries and everything of that kind. In other words, at some branches like our Southern Branch, where we have no farm at all, we still have a farm appropriation.

Senator SPENCER. It does not mean food production?

General WOOD. No, sir; not necessarily food production.

Senator WADSWORTH. Alone?

General WOOD. Alone.

Senator WADSWORTH. You do produce milk?

General WOOD. At some branches; yes, sir; but that is the only explanation we have been able to give for the reason of the House prohibition.

Senator SPENCER. Why is there not some force in that? Take, for instance, the farm.

General WOOD. I think there is; but the Budget Commission, on the contrary, when they handled the bill with us, ordered us to cut these estimates on the basis of getting a certain amount of money from the Veterans' Bureau.

Senator SPENCER. In other words, you want one of two things: You either want that proviso out and your original estimates for these three items or else you want your modified estimates—modified because of your expectation of aid from the Veterans' Bureau? If that is to stand, then you want this proviso out?

General WOOD. If this proviso is in, we want the original estimates. If it is out, then we will take the estimates of the Budget Committee. We are caught between the bumpers; that is the size of it.

ORIGINAL ESTIMATES.

Colonel WADSWORTH. Mr. Chairman, if you will refer to page 335 of the hearings you will find an abstract of our original estimates as submitted under each head of expenditure. This is the original submission to the Budget Commission. These figures were intended to cover the complete operation of the home without expectation of being augmented by funds from any source.

Senator SPENCER. Colonel, in order that I may get this clear let me take one illustration. Your original estimate was \$90,000 for current expenses for the Central Branch?

Colonel WADSWORTH. Exactly.

Senator SPENCER. Now, then, on the theory that you were to get aid from the Veterans' Bureau, you reduced that \$90,000 from your original estimate to \$72,000 on your amended estimate?

Colonel WADSWORTH. Exactly, sir.

Senator SPENCER. And then it runs all the way through?

General WOOD. Yes, sir.

Senator WADSWORTH. You expected to get \$18,000 on that from the Veterans' Bureau?

Colonel WADSWORTH. We expected to get \$18,000 on that from the Veterans' Bureau.

General WOOD. I can explain just exactly why that \$18,000 figure runs all through the central branch—because at the central branch our proportion of World War men is somewhere between 20 and 25 per cent, and you will find that that is just 20 per cent of the appropriation.

Colonel WADSWORTH. Out of a membership of 3,000 there we have something more than 600 young men. Therefore, we thought we could properly charge 20 per cent of the expenditures to the younger element, and if the Veterans' Bureau supplied that, we could do it without that amount from the other source.

Senator SPENCER. Now, let me ask just one more question to make it clear to me. Your original item for subsistence for the central branch was \$400,000?

Colonel WADSWORTH. Exactly.

Senator SPENCER. But you expected to get \$80,000 from the Veterans' Bureau, so your amended estimate on that theory was \$320,000?

Colonel WADSWORTH. Exactly; and so all the way through. In the figures we submitted there we also submitted in a parallel column the amount of the bonus, if the increased compensation bill was passed. A further reduction was made by the Budget Commission on our figures. On that \$90,000 item we reported a bonus or additional compensation of \$15,000 of our \$72,000 to be made up there. That would have scaled it to \$57,000. The Budget Commission made an arbitrary reduction of \$2,000 more, giving us \$55,000.

Senator SPENCER. In other words, your increased compensation items on page 333 are all bonus items?

General WOOD. Increased compensation.

Senator SPENCER. That is all the bonus all the way through?

General WOOD. Yes, sir; increased compensation.

Senator SPENCER. And is that included in the amounts in the first column?

General WOOD. Yes, sir.

Senator SPENCER. That is included?

Colonel WADSWORTH. Yes, sir; that is included.

Senator SPENCER. The other figures are merely to show how much of the amounts in the first column are taken up by the bonus items?

General WOOD. Increased compensation; yes, sir.

Colonel WADSWORTH. We did not think we could eliminate any part of our estimate, with the idea that it might be supplied by other

legislation; but we could separate it so that if it were supplied from another source it could be eliminated.

Senator SPENCER. How near to your original estimates did the Budget approve?

General WOOD. Take the matter of current expenses, to start with: When they scaled off the Veterans' Bureau and the increased compensation, the figure had been \$57,000, and they allowed \$55,000, as you will see if you will look on page 119.

Senator SPENCER. That is right.

Colonel WADSWORTH. There is not a very great reduction from our total items. Our total expenditures last year under that item run \$89,000, I think, and we submitted \$90,000, and they have allowed us very close to that amount.

Senator SPENCER. You mean by "they," the Budget?

Colonel WADSWORTH. The Budget.

Senator SPENCER. And the House took the Budget figures?

Colonel WADSWORTH. The House took the Budget figures, with certain reductions in some instances.

Senator SPENCER. Mainly, they took the Budget figures?

Colonel WADSWORTH. They did.

Senator SPENCER. And then, as you think, they nullified the Budget figures by this proviso at the end?

Colonel WADSWORTH. Absolutely; they fixed it so that it would be unworkable.

General WOOD. I might say, Mr. Senator, that there are two or three specific items which we will bring up with you later, but we felt that the first thing to do was to get this basic principle.

Senator WADSWORTH. You are speaking about a basic principle. There is another one involved here. These homes, which have been going for 40, 50, or 60 years and have been appropriated for directly by the Congress in itemized appropriations carefully estimated and presumably decently expended, are now going to be supported by a double set of appropriations—one similar to the original one, directly from the Congress, itemized; the other source is to be from comparatively lump-sum appropriations by the Congress for the support of the Veterans' Bureau, and the Veterans' Bureau is to turn over to the soldiers' homes sums presumably sufficient to support the World War veterans that are in the homes.

General WOOD. I beg your pardon—let me interrupt you just one moment—to support the beneficiaries of the Veterans' Bureau in the homes. We have many men who are World War men, not beneficiaries of the Veterans' Bureau, now in the homes.

Senator WADSWORTH. Certainly; that is an important amendment.

ADMISSION OF SOLDIERS TO HOMES.

Senator SPENCER. How do they get in?

General WOOD. Under the specific act of Congress admitting all disabled soldiers of any wars to the homes.

Senator WADSWORTH. Whether the disability occurred during the war or occurred in a street accident 10 years later?

Senator SPENCER. Oh, yes.

General WOOD. As a matter of fact, Mr. Senator, if a man appears at the door of one of our homes with a leg gone we admit him, whether he lost it in a sawmill or in the Argonne.

Senator SPENCER. Do you do the same thing in a case of typhoid fever?

General WOOD. Yes, sir.

Senator WADSWORTH. For anything.

General WOOD (addressing Colonel Wadsworth). Have you the clause of admission here? I should like to show it to the Senator.

Senator SPENCER. That is a wonderfully helpful provision for soldiers, is it not?

General WOOD. Oh, it is the most wonderful provision in the world.

Senator SPENCER. It absolutely guarantees them hospital attention and care during disability.

Colonel WADSWORTH. At any stage of life.

Senator SPENCER. And when they get to the point where by statute we make age a disability they go in on their age?

Colonel WADSWORTH. Yes, sir.

General WOOD. Absolutely.

Colonel WADSWORTH. It is very liberal.

General WOOD. Mr. Senator, if you care to look at that little insert at the bottom of the page, I think it will be rather enlightening in this discussion. [Handing pamphlet to Senator Spencer.]

Senator WADSWORTH. It seems to me there is a very grave matter of public policy involved in this situation.

General WOOD. There is.

Senator WADSWORTH. Some agency should be solely responsible for the expenditure of all the money that is used in the support of these homes. Now, there are to be two agencies responsible. General Wood, of course you have not as yet operated under this new scheme?

General WOOD. Oh, yes; we have been operating under it for two years.

Senator WADSWORTH. Are you getting part of your money from the Veterans' Bureau?

General WOOD. Yes, sir; for two years we have been.

Senator WADSWORTH. I am wrong in that, then. Is your discretion in the expenditure of that money in a specific branch interfered with?

General WOOD. No, sir.

Senator SPENCER. Do they give you a lump sum from the Veterans' Bureau for each branch?

General WOOD. For the last two years they have made a lump appropriation to us, and we have distributed it among the branches.

Senator SPENCER. One lump sum for all the branches?

General WOOD. Yes, sir.

Senator SPENCER. You could distribute it among the branches as you liked?

General WOOD. Yes, sir.

Senator SPENCER. And then within the branches you could distribute it for such purposes as you liked?

General WOOD. Yes, sir.

Senator SPENCER. If, for example, you wanted to do so, you could take all the allotment for a single branch and put it into subsistence or put it into farm?

General WOOD. Up to the present time there has been no limit to it. We have just been given a lump appropriation.

Senator WADSWORTH. In other words, this new system violates the basic law?

General WOOD. Practically.

Senator WADSWORTH. The basic law provides that the appropriations shall be made according to certain details laid down in the law.

Senator SPENCER. Would it be possible to provide that the lump sum should be apportioned among the branches in proportion as the general legislation provided and then that the amount allotted to each of the branches should be apportioned among the various subdivisions as the original basic appropriation was apportioned?

General WOOD. That would be a very difficult matter, Mr. Senator, for this reason: We are supposed to take care of the beneficiaries of the Veterans' Bureau as they come to us, and under the plan which is worked out for next year the money is to be apportioned to us quarterly on a per capita basis, and we can not tell how many Veterans' Bureau beneficiaries we will have at any one time. As far as the board is personally concerned, I can say without hesitation, as we told the House committee, that we would like to go back to the old style of getting our money directly; but they felt that it was too late to make any changes this year, and so we are going ahead on the same basis. Personally, speaking for the board and speaking for the officers at headquarters, we would prefer to have our money directly, but of course that is up to you gentlemen.

Senator SPENCER. When you get your lump sum from the Veterans' Bureau, bearing in mind how many ex-service men there are in the different branches, if you should conclude, for example, to appropriate 20 per cent of it to the Central Branch—just assume that arbitrarily—

General WOOD. That is what we will have to do this year on the basis we have been working on.

Senator SPENCER. When you appropriate 20 per cent of it to the Central Branch, would it be helpful if there were put into the law a provision that of the amount thus appropriated for the Central Branch there should be a distribution among the seven items in the same proportion that the seven items bear to the statutory appropriation? Would that be helpful?

General WOOD. The only thing that we could do this year, as the appropriation is set forth at present, is this: We have figured that we would need, say, \$90,000 for current expenses. Let us take that one item. Twenty per cent of that is set aside, and has to be furnished by the Veteran's Bureau. The only way in which we can work out this thing satisfactorily this year, to my mind, would be to go on that basis of 20 per cent. That is, 20 per cent of the specific item of current expense at the Central Branch during the fiscal year 1923 was to have been made up of an allotment of \$18,000 from the Veterans' Bureau, and that 20 per cent is the key to all appropriations at the Central Branch. Of course, at other branches the key, you might call it, will vary, going up to 50 per cent.

Senator WADSWORTH. The ratio?

General WOOD. Yes, sir.

Senator WADSWORTH. But as at present operated—and I make this observation, of course, impersonally—as at present operated there is no check whatsoever which the Congress can exercise over the expenditure of Veterans' Bureau money in the soldiers' homes, because, as you said and as Senator Spencer said a moment ago, if the board wanted to do such a thing it could take all the Veterans' Bureau money and spend it at Johnson City, Tenn.?

General WOOD. Yes.

Senator SPENCER. Without violation of the law?

General WOOD. Without violation of the law; that is true, sir.

Colonel WADSWORTH. The director of the bureau has indicated that next year he wants to make specific allotments, so that question will be somewhat restricted next year from the wide-open proposition that it is this year. This year it is even wider than you suggested, because it carries with it a provision for making alterations and improvements. In our minds it is very objectionable from every standpoint to have a wide-open appropriation. It invites raids on that fund from every source that can participate in it. That is human nature. They feel that it is easy money.

ALTERATIONS AND IMPROVEMENTS.

Senator WADSWORTH. You are doing building under this column, are you?

Colonel WADSWORTH. We are doing alterations and improvements.

Senator WADSWORTH. Yes. Those alterations in some instances are very extensive, are they not?

Colonel WADSWORTH. Very extensive.

Senator WADSWORTH. They are practically new buildings?

Colonel WADSWORTH. Some of them are very extensive—converting old barracks and buildings so as to make them suitable for present use; so it has been given a rather liberal construction.

Senator WADSWORTH. Is that done under the item of "Repairs"?

Colonel WADSWORTH. No, sir; that is done under the item "Alterations and improvements." The appropriation act of last year carries with it a special authority, and this year's bill carries the same; but it is the intention to submit to the director of the bureau a definite estimate for each branch of the home and for the separate items of the alterations and improvements that are to be covered. Next year it will not be the same wide-open proposition that it is this year, but this year there is just one objection to the suggestion of the Senator that we should limit that. It may happen that at certain branches we will not need to spend this money up to this extent under certain heads and we may need it under another head. For instance, we might need the full amount of it at the Mountain Branch under "Subsistence."

We might not need nearly the full amount of it under some other head. That fluctuates, according to the membership; so, if a restriction were put in there that compelled us to spend exactly the same proportion that we are asking for, it might not result well. I think if that prohibition is left off, and we are left to stand on the original scheme, as fixed by the Budget Commissioner, our troubles would be wiped out for this year. If we are to coordinate and

work with money from the two sources, the money from each source ought to be equally free to be expended for the purposes intended.

NUMBER OF MEN IN THE HOMES.

Senator WADSWORTH. How many members has the home to-day?

General WOOD. On March 31 we had present at all of the homes about 14,000 men; sir.

Senator SPENCER. I notice, General, that you take into the homes the Organized Militia of the National Guard?

General WOOD. Yes, sir.

Senator SPENCER. Does that mean that any man who served in the Organized Militia during the Civil War is eligible to the homes?

General WOOD. No, sir; you will see that next clause—

Senator SPENCER (reading): "When called into the Federal service"?

General WOOD. Yes, sir; "when called into the Federal service." There must be a Federal muster. That is to take care of the National Guard called into the service of the United States, as in 1916, for the Mexican border service—when there was a Federal muster. There must be a Federal muster.

Senator SPENCER. When they were called in there, let us say for six months or three months—that gave them that right all during their lives?

General WOOD. Yes, sir.

Senator SPENCER. Take the Militia, which was called into the Federal service and paid by the Federal Government, subsisted, transported, and paid, but never got a discharge from the War Department, but was disbanded by the President—that was true in my State. Would they be eligible?

General WOOD. No, sir; you see, the very first clause, "honorably discharged," covers that. We have had some very interesting questions, Mr. Senator, upon the Kansas and the Missouri Militia during the Civil War. We have always stretched it to the limit to take care of the old men.

Senator SPENCER. "Honorably discharged" cuts them out.

Senator WADSWORTH. You say you had 14,000 members on March 31—that is, for all wars?

General WOOD. For all wars; yes, sir.

Senator WADSWORTH. Of those, will you give us the number of members resulting from each war?

General WOOD. I shall have to make a slight computation here. I might state that that was the average present. We have on our rolls—which will give the figures a little bit better—to-day 18,000, of whom 9,800 are Civil War men, 5,000 Spanish and Philippine soldiers, and 3,200 World War veterans.

Senator WADSWORTH. Spanish war and Philippine insurrection soldiers?

General WOOD. Yes, sir. That is practically 10,000 for the Civil War 5,000 for the Spanish-American and Philippine wars, and 3,200 for the World War, making a population on our rolls of 18,000 men.

NUMBER OF VETERANS' BUREAU BENEFICIARIES.

Senator WADSWORTH. Can you distinguish, in the matter of the World War, between those who are beneficiaries of the Veterans' Bureau and those who are not?

General Wood. Yes, sir; I can. I have figures right here on March 20, showing the number of nonbeneficiaries that were at the various branches, if you will just let me add them up. I have them by branches.

On March 20, of those present in the home, 300 were in no way beneficiaries of the Veterans' Bureau. Of the remaining 2,700, about 50 per cent had claims pending and were not receiving compensation, though they might have been entitled to it, but of course that is a question we can not pass on; but the percentage, Mr. Senator, is one that is likely to increase constantly as the victims of peace increase in numbers.

Senator WADSWORTH. You mean in percentage of nonbeneficiaries?

General Wood. Yes, sir; the percentage of nonbeneficiaries will increase.

CAPACITY OF HOMES.

Senator WADSWORTH. What is the capacity of the home now?

General Wood. The capacity of the home to-day is probably in the neighborhood of 16,500 to 17,000.

Senator WADSWORTH. It used to be more, did it not?

General Wood. Yes, sir; it used to be more, but the cutting down is largely caused by the fact that at Marion and Mountain we have changed absolutely from a barrack to a hospital basis, and larger cubic footage is necessary in a hospital than in a barrack. Of course, it is very probable that we could accommodate 17,000, and we have improvements under way now which probably would raise it about a thousand, including the present buildings we are putting up at Marion, Dayton, Milwaukee, etc.

Senator WADSWORTH. Are you finding greater demands made in the last two or three years in the matter of comforts and amusements than was the case with the Spanish War veterans and the Civil War veterans?

General Wood. Yes, sir.

Senator WADSWORTH. In what way do they arise?

General Wood. That is a hard question to answer. The scale on which the Army was maintained in the way of outside amusements, benevolent societies, etc., during the World War was an entirely different scale from that which prevailed during either the Civil War or the Spanish-American War or the Philippine war. The kindness and generosity of the people of this country, as exemplified in the Red Cross, the Salvation Army, the Y. M. C. A., the Jewish Relief, and all similar organizations, made the life of a soldier during the recent war a more pleasant life in many ways than it was before; and we find that the natural result is that the feeling is carried into the homes. It is perfectly natural. It is simply a fact, that is all.

Senator WADSWORTH. You have increased your estimates for certain items on that account?

General WOOD. Not primarily on that account. The question of amusements, Mr. Senator, we take care of from the post fund. Of course, it has resulted in quite a large increase in our hospital item. That is an item which is probably increased more than anything else by the increasing demands for specialization, etc., in hospital services.

POST FUND.

Senator WADSWORTH. How is the post fund accumulated?

General WOOD. The post fund is accumulated largely under an act of Congress of 1902, which provides that in case of the death of members of the home who have no relations within certain laid-down lines of relationship, unpaid pension money is turned over to the post fund. That is our largest item.

Senator WADSWORTH. Does that act apply to the World War veterans?

General WOOD. No, sir; it does not.

Senator WADSWORTH. Then your post fund will gradually dwindle and cease to exist, will it not?

General WOOD. It will, sir; in time it will cease to exist.

Senator WADSWORTH. Then this expense that you have just alluded to will come from the Government?

General WOOD. It will, sir. As long as the money comes in at the present rate, it will keep this expense off of you.

Senator WADSWORTH. How much, roughly speaking, does it amount to in a year?

General WOOD. In the neighborhood of \$100,000.

Senator WADSWORTH. Would it be practicable and proper to extend the provisions of the law so as to apply to all members of the home, no matter what war they served in?

General WOOD. That would make a very basic change in the provisions of your compensation law. You see, under the general law as it stands to-day, all pensions going to members of the home are paid through the Treasury to each branch home, so that in that case the money goes through the home; but in the case of the compensation the money is paid directly by the Veterans' Bureau monthly to each man drawing compensation, and it never is in the hands of the home.

It is, therefore impossible to do what you suggest until there is some change in the way of paying the money.

I might say, Mr. Senator, that we feel, and in this we are agreed with by many of the other hospital agencies of the Government, that if it were possible to pay the compensation through the head of the hospital it might be a good thing. There is a great deal of money which men are entitled to which goes into hospitals where the men are sick and where it might be better if the money were to be held back until they were well. Of course, that is a question of general policy.

Senator WADSWORTH. As a matter of fact, that question has arisen in a rather aggravated form in some of your institutions, has it not?

General WOOD. It is a very serious question in the case of our tuberculosis patients. At Johnson City we have anywhere between 800

and 1,000 tuberculosis patients. The vast majority of them are beneficiaries of the Veterans' Bureau. The modern treatment of tuberculosis, as set forth by the doctors, includes rest as one of the very basic principles of it all—that a man shall keep regular hours, spend a certain number of hours each day on his back in the open air, and everything of that kind.

Where there is a great deal of money in the hands of men it is always difficult to quite live up to all those rules, and it is a question that we had up before the House committee and that has been up in discussions before. It is absolutely a question of policy for you gentlemen to settle, but if there were some restriction on it I believe it would add to the chances of the men's recovery.

Senator WADSWORTH. In the case of Spanish War veterans and Civil War veterans—

General WOOD. It is paid to the treasury.

Senator WADSWORTH. Yes; but you have the right under the statute to withhold the pension money, in whole or in part, for the good of the recipient?

General WOOD. Absolutely.

Senator WADSWORTH. You hold it in trust for him?

General WOOD. We hold it in trust for him; yes, sir.

Senator WADSWORTH. And when he leaves the home—

General WOOD. We pay it to him.

Senator WADSWORTH. Do you give him any interest?

General WOOD. No; no interest. We have no fund appropriated out of which to pay interest, so we can not give him interest; but when he leaves the home all the pension money which has accumulated to his credit is paid to him. There is no deduction.

Colonel WADSWORTH. May I interrupt right there to say, on the question of interest, that this fund remains now in the Treasury Department. It is not drawn out by the home at all until it is to be paid to the individual.

Senator WADSWORTH. You notify the Treasury Department, then, as to what shall be held back?

Colonel WADSWORTH. No, sir; the Treasury Department transfers a credit to the disbursing officer, and the disbursing officer draws his checks directly on the Treasury Department.

Senator WADSWORTH. It is not drawn out of the Treasury until you draw it?

Colonel WADSWORTH. It is not drawn out.

Senator WADSWORTH. Is it your suggestion that a similar system be established for the World War veterans for their own protection?

General WOOD. I think it would be worth considering, sir. I think it would be to the benefit of the men to let the money accumulate until they are cured, and then give it to them in a lump sum, thus putting them in a position where they can take care of themselves, or buy property, or anything of that kind.

Senator WADSWORTH. It is a fact to-day that in some instances—it is inevitable, I suppose—they have these substantial sums each month, and they leave the reservation and spend it downtown, so to speak?

General WOOD. Yes, sir.

Senator WADSWORTH. In ways which are distinctly injurious to their health?

General WOOD. I think so; yes, sir.

Colonel WADSWORTH. I might add, sir, that any provision that affects a man who is being hospitalized, unless it applies to all the hospitals where the man is treated, would not be workable.

Senator WADSWORTH. You mean that it should apply to public health hospitals, and so on?

Colonel WADSWORTH. All hospitals.

General WOOD. It should be universal.

Senator WADSWORTH. Has any measure been introduced to bring that about?

General WOOD. No, sir.

Senator WADSWORTH. I heard that some one had introduced a measure of that kind in the House.

General WOOD. Not that I have heard of, sir.

Senator WADSWORTH. What items do you want to call our attention to?

SOUTHERN BRANCH.

Colonel WADSWORTH. The items at the Southern Branch were reduced, where we do not maintain beneficiaries of the War Risk and devote the branch entirely to the care of older members, and it is not intended to furnish any of this Bureau of War Risk money to that branch. Therefore the appropriation ought to be restored to the original amount asked for.

Senator WADSWORTH. Which appropriation do you refer to at the Southern Branch?

Colonel WADSWORTH. All of the items, sir. I have not gone over them closely enough to tell you offhand, but I think my statement applies to each item.

Senator HARRIS. One item is on page 122, line 17.

Senator LENROOT. They seem to have given you all that was estimated for.

Colonel WADSWORTH. What is estimated for is misleading. What is estimated for is not our estimate, but the Budget Commissioner's estimate.

Senator LENROOT. I know, but——

Senator WADSWORTH (interposing). That is, the official estimate?

Colonel WADSWORTH. Yes; but, of course, if they have cut that below what in our judgment will run the homes——

Senator WADSWORTH (interposing). Let us go over that and see.

Senator LENROOT. Just a moment. Under the law you are not permitted to make any request for an increase. We can ask any questions, but——

Colonel WADSWORTH (interposing). You can ask any questions at all that you like. I am simply telling you that the item is different from the estimate that we submitted under each head.

Senator WADSWORTH. In all, for the Southern Branch there is appropriated for by this bill \$476,000?

Colonel WADSWORTH. Yes, sir.

Senator WADSWORTH. Is that the sum total of the Budget estimates?

Colonel WADSWORTH. That is the sum total of the Budget estimates.

Colonel WADSWORTH. Our sum total is \$619,000.

DANVILLE BRANCH.

Senator WADSWORTH. The next item is Danville, page 125?

General WOOD. Yes, sir.

Senator LENROOT. They cut your estimate somewhat on the Danville estimate?

Colonel WADSWORTH. Yes.

General WOOD. The household was cut \$10,000 under the estimate.

REPAIRS.

Colonel WADSWORTH. The repairs item is the worst. The Budget commissioners cut that \$10,000; and then in this bill when they passed it they made a further cut of \$30,000.

Senator WADSWORTH. Your current appropriation is \$60,000?

Colonel WADSWORTH. Our current appropriation is \$60,000 with the increased compensation added.

Senator WADSWORTH. Under the item of repairs?

Colonel WADSWORTH. Yes, sir.

Senator LENROOT. That is the present law?

Senator WADSWORTH. That is the current appropriation.

Colonel WADSWORTH. To that we have, of course, added the increased compensation, which amounts to \$5,000 and something.

Senator LENROOT. What was your estimate for the entire Danville Branch?

Colonel WADSWORTH. \$648,500.

Senator LENROOT. To which was added the increased compensation?

Colonel WADSWORTH. Yes, sir.

Senator LENROOT. So that your original estimate was \$560,500?

General WOOD. The estimate in which the cut hurts worst is that of repairs.

Colonel WADSWORTH. Repairs is the one on which we can get along with the cut least. May I go over the Danville items?

Senator WADSWORTH. Yes.

Colonel WADSWORTH. Originally we submitted an estimate asking for \$72,000, of which \$16,000 was increased compensation. Under subsistence we asked for two hundred and forty, in which thirteen was increased compensation. Under household we asked for one hundred and thirty, of which eight thousand five hundred was increased compensation. Under hospitals we asked for a hundred and thirty, of which nineteen thousand was increased compensation. Under transportation we asked for five hundred. Under repairs we asked for sixty, of which five thousand three hundred was increased compensation. Under farm we asked for twelve, of which three was increased compensation; making a total of \$648,520.

Senator WADSWORTH. Have you eliminated in each case the increased compensation?

Colonel WADSWORTH. The increased compensation went out in each case.

Senator LENROOT. Then the House cut it \$65,000 additional?

Colonel WADSWORTH. \$65,000 additional; and that cut seems to have been distributed over the several items, with the heaviest cut on repairs.

Senator LENROOT. They made the same cut on the hospital.

Colonel WADSWORTH. The percentage is not quite so heavy. We only want to say this: That we do not believe that a single item as originally submitted there was more than the requirements of the branch are going to make necessary to be expended if the branch repairs and the organization of the branch is kept up to the proper standard.

EASTERN BRANCH.

Senator WADSWORTH. What other branch do you want to call our attention to? Did you have something to say about the Eastern Branch?

Colonel WADSWORTH. I do not think so.

General WOOD. Let us take the Eastern and look at the Eastern while we are here. The total is \$317,500. We asked for \$348,000. There is a cut of \$31,000 there.

Colonel WADSWORTH. There has been a cut over in the Budget Committee, recommended there, of \$31,000, but I have not had time to get those items.

CURRENT EXPENSES.

General WOOD. Under the heading on page 121, if you will look at that, please, Eastern Branch, under the heading of current expenses the Budget Commissioners, estimated \$47,000, which cutting out the increased compensation, and the provision made by the House was \$38,000, which was a cut of \$9,000 in an item which is practically 100 per cent made up of salaries, all the way through. There is very little chance there for any leeway.

Senator SPENCER. How much was increased compensation under the Eastern Branch?

Colonel WADSWORTH. That is all eliminated, in these figures.

Senator SPENCER. So that originally the item was \$52,000?

Colonel WADSWORTH. That was cut out, and it was left at \$47,000; and they cut us to \$38,000.

Senator WADSWORTH. Your current appropriation is \$49,000. Did that include any increased compensation?

General WOOD. No, sir.

Senator WADSWORTH. Has your overhead or your salary list in any way gone down or declined in total?

General WOOD. No, sir; it was made up including the salary of the governor, the commissary—the fixed running expenses which you must have to keep up the place. Take the treasurer's office. You have to purchase exactly the same number of items for 3,000 as if you had 100,000.

Senator WADSWORTH. You mean the quantity is the same?

SUBSISTENCE.

General WOOD. Not the quantity, Mr. Chairman, but the same number. You might only have to buy two potatoes instead of three, but you would have to buy potatoes. Under subsistence the Budget, for instance, estimated \$117,000. The current appropriation is \$119,000. They increased compensation and reduced that to \$95,000.

Senator WADSWORTH. Do you suppose the House figured that the number of members of that branch would be less?

General WOOD. It would have to run down pretty rapidly if you had a 20 per cent reduction in membership.

Senator SPENCER. Was not that the reason you had a little balance left over this year under that branch?

Colonel WADSWORTH. Our expense under subsistence last year was \$106,000.

Senator SPENCER. You spent last year \$106,000?

Colonel WADSWORTH. Yes; \$106,000 expended.

Senator SPENCER. So that you had something left over there?

Colonel WADSWORTH. Yes.

General WOOD. They have actually cut that \$11,000 below what we spent last year.

Senator WADSWORTH. If you spent \$106,000 last year, why did you ask for \$117,000 this year?

Colonel WADSWORTH. We have extended the hospital space and made provision for caring for an additional number of hospital patients.

Senator WADSWORTH. And their subsistence is more costly than that of others?

Colonel WADSWORTH. Yes; far and away. A man on diet we estimate at 40 cents, and a man in the hospital 75 cents to \$1, without any special diet.

HOUSEHOLD.

General WOOD. In household we were allowed \$90,000 by the Budget commissioners and the House appropriated \$90,000, so that that balances.

Senator SPENCER. But you had a deficit in that item last year?

HOSPITAL.

General WOOD. We did; yes. Under hospital we were allowed \$48,000 by the Budget officer and the House gave us \$48,000.

REPAIRS.

Under repairs we were allowed \$28,000 by the Budget officer and the House gave us \$28,000.

Under farm, the same thing applies.

Under the Eastern Branch there are two places that were cut where I do not see how we can meet it under what the Budget commissioner allowed us. Those items are current expenses and subsistence.

PROHIBITION AGAINST USE OF VETERANS' BUREAU ALLOTMENTS.

Senator WADSWORTH. Now, reverting again to that proviso at the bottom of page 126, you have to furnish us with a memorandum showing how much these various items applicable to all these branches should, in your judgment, be increased if the proviso is allowed to stand. I assume that that increase in each case will follow arithmetical law?

General WOOD. Absolutely.

Senator WADSWORTH. It will be based in each branch upon the number of Veterans' Bureau beneficiaries as compared to the total number of members in the branch?

General WOOD. Yes, sir; the same ratio as the figures of last September of the Budget Commission's will govern this case.

Senator SPENCER. Have we not those very figures here in the House hearing?

General WOOD. You have—in that letter.

Senator SPENCER. Here is the original estimate [indicating in House hearings].

Colonel WADSWORTH. There is nothing we can add of any advantage over what we have put in the House hearings on page 335. That covers that in detail. That was made up by giving the charges in ratio to the number of membership as we thought it would exist and as we think to-day it will exist.

Senator WADSWORTH. Then, you need not submit the memorandum I have just asked for. Now, of course, these estimates here on page 335 do not include anything for extra compensation?

General WOOD. No, sir; that is absolute.

Senator WADSWORTH. That was the Budget estimate?

General WOOD. On page 335, that was our estimate for entire maintenance, excluding any possibility of—

Senator WADSWORTH. Then you will have to give us the items.

General WOOD. That was including the increased compensation item?

Colonel WADSWORTH. Yes.

Senator WADSWORTH. You can make it up, no doubt, before you leave town?

Colonel WADSWORTH. Yes, sir.

Senator WADSWORTH. Then the memorandum was including extra compensation and including everything else?

Colonel WADSWORTH. Yes, sir.

Senator WADSWORTH. Which is not up to the Budget estimates?

General WOOD. Yes; we understand, up to the Budget estimate.

Colonel WADSWORTH. Then in a case like that at Danville there is no cure for it?

General WOOD. Not unless they would change it.

Senator SPENCER. At Danville, for instance, there are no more coming there. They do not expect any soldiers there?

DANVILLE BRANCH.

Colonel WADSWORTH. Our memorandum that we submitted left Danville out of it. They have made an arbitrary reduction there on some of the items at Danville that we could not get by with.

Senator SPENCER. I think we ought to ask them for the facts about Danville and these others in the statement that he furnishes, so as to have them before us and so that it will be an answer to our inquiries.

Colonel WADSWORTH. Mr. Chairman, I am not at all clear if the statement of the Budget officer has excluded everything from the figures he submitted. His figures are final. Everything is excluded there.

Senator WADSWORTH. Then your memorandum will have to show everything except increased compensation.

Colonel WADSWORTH. But if I am to take his figures there is nothing to come out of it.

Senator WADSWORTH. I do not mean to take his figures. We have got to do one of two things. Assuming that your contention is entirely correct—and I am inclined to think that it is—that the homes can not run with this proviso in here, we have either got to leave the proviso in and increase the items of current expenses and farm, etc., or take the proviso out.

Senator LENROOT. In other words, you want the figures of what you would use under these three items if you had the allotment for the purpose?

Colonel WADSWORTH. Then we must take the Budget Commissioner's figures only.

Senator WADSWORTH. Yes.

Colonel WADSWORTH. I can do that very readily, because that is set out in our figures representing the difference between the figures we submitted there and our original figures in each instance.

Senator WADSWORTH. And that would also take care of the Danville Branch?

Colonel WADSWORTH. Yes; that would take care of any of the branches. The Danville Branch would be taken care of, and there is where we are going to be hurt the worst.

Senator SPENCER. It might be that Danville would require a little different treatment from any of the other branches. If we concluded to cut out the proviso and let these figures stand, it might still be true that under the peculiar circumstances at Danville we would have to increase the Budget estimate up to their estimate, because with the proviso in Danville it is still under the actual amount necessary, as they say, to run the branch.

General WOOD. Let me put this thing straight. In making our figures last fall with the Budget commissioners we excluded the Southern and Danville Branches, because they were primarily old soldiers' homes which we were using very largely for members of the Civil War. Therefore in making our deductions, as you will find, on page 334, at the Central, the Northwestern, the Western, the Pacific, the Marion, and the Mountain Branches, and at Battle Mountain Sanitarium we referred a letter to the Budget officer covering deductions which we were to get from the Veterans' Bureau. Now, the Danville and the Southern Branches are not included in that, because we have rather segregated them for the older classes of men. Therefore the Veterans' Bureau would not help us out much unless we did get quite a number of beneficiaries at Danville.

Senator SPENCER. And yet the Budget reduced you on the Danville and Southern Branches, which was the same as if you were going to get something?

General WOOD. No; the Budget officer did not reduce us. He made some arbitrary cuts, but they are not based on our getting money back; they are based on our not getting money at all.

Senator LENROOT. So that that is independent?

General WOOD. That is an independent matter; yes, sir.

Senator WADSWORTH. Speaking personally, I hope that the board and the management will keep a very close account in these increases

in expenditures for things other than current expenses and farm and repairs, which have become evident in the last year or two. I think we are apt to run to extravagance.

General WOOD. I know we are.

Senator WADSWORTH. From all I can hear there is a lot of extravagance in Government institutions going on.

PERSONNEL FOR HOSPITAL FIXED BY BOARD OF COORDINATORS.

General WOOD. Of course, Mr. Senator, what you have just stated leads naturally to a proposition which I wish to put before your committee. Last fall by Executive order a board of coordinators in charge of hospital service was appointed by the President of the United States, of which General Sawyer was chairman, including myself as one of the members. We had numerous meetings, and a committee was appointed to determine upon the necessary personnel for a 200-bed hospital. The committee reported at a certain one of the meetings this personnel, and it was adopted by the committee of coordinators, all voting for it except myself, and I stated that that being entirely different from the schedule which the board had ordered for the year I had no authority whatsoever to change our schedule as ordered for the year.

PERSONNEL REQUIRED FOR HOSPITALS.

The personnel for a 200-bed hospital is as follows: 10 doctors; 20 nurses; 4 occupational aids; 4 social service workers; other personnel, 130; occupational trainers and vocational instructors, 14, making a total of 182 for a 200-bed hospital, and in case of increasing the number, while it would not increase absolutely in proportion to the additional number of patients, still it would increase very largely.

Now, as a matter of fact, the appropriations which we submitted for hospitals were submitted before this report was adopted by the coordinators appointed by the President, and the appropriations which the House passed upon for a hospital, and which are before you gentlemen now, for hospitals, will not give us a personnel anything like that. I will be frank with you and say so.

Senator WADSWORTH. Do you need a personnel anything like that, 189, for 200 patients.

Senator SPENCER. What was the general estimate for personnel for a 200-bed hospital? Have you got any hospital that small?

General WOOD. Yes; we have got a hospital pretty near that small. We have not got any absolutely that small. And relatively, I would say, our personnel would not be 50 per cent of that personnel.

Senator WADSWORTH. That is what I said when I remarked that I understood things were going extravagantly.

General WOOD. What I want to put before you gentlemen is this. It is a pretty serious thing for a layman to state that a hospital as agreed upon by high members of the medical profession is excessive, but if Congress expects us to furnish this personnel for hospitals we would just about have to double our hospital appropriations.

Senator WADSWORTH. Do you understand that that proportion of personnel is being maintained at the Public Health Service hospitals?

General WOOD. Colonel Lavender, the last time the thing came up, said they had about that personnel in the specialized hospitals, but that they did not have the personnel in some of their hospitals.

Senator SPENCER. I can see that the personnel for ex-service men would naturally be considerably larger than in a hospital for old veterans.

General WOOD. Oh, yes; that point we have already made. We have very materially increased our personnel, however, Mr. Senator. Take the Central Branch; before we went into the specialization business we had about seven or eight doctors. Now we have 15 or 16. We have doubled the number of our personnel. We have doubled our nurses. But a Central Branch on the basis of that would require in the neighborhood of 30 to 35 doctors.

Senator SPENCER. Is it not very helpful to know what the Presbyterian Hospital in New York, or the Barnes Hospital in St. Louis, considers the proper personnel?

SOCIAL-SERVICE WORKERS.

Senator WADSWORTH. Do you employ any social-service workers?

General WOOD. No, sir.

Senator WADSWORTH. Do you intend to do so?

General WOOD. We get them from the Red Cross. They pay them.

Senator LENROOT. How many social-service workers do you have to 100 beds?

General WOOD. They figure it there.

Senator LENROOT. I know they do, but what have you?

General WOOD. We have in Dayton in the neighborhood of 500 World War service men—I am speaking of our present status—and we have about three social-service workers.

Senator WADSWORTH. Under this schedule you would have 10?

General WOOD. Yes, sir.

Senator WADSWORTH. Do you find three enough?

General WOOD. We have had no complaint.

Senator WADSWORTH. What do they do?

General WOOD. They are supposed to do follow-up work, contact work with families, and various things of that kind. The question is sort of hard to understand. It is sometimes sort of hard to get it all.

Senator WADSWORTH. Are they under your jurisdiction?

General WOOD. Yes; we insist upon that. They are under the jurisdiction of our service and must obey our orders, although they are furnished by the Red Cross.

Senator LENROOT. Are they in the field?

General WOOD. No.

Senator LENROOT. They are in the hospital all the time?

General WOOD. Yes.

Senator WADSWORTH. I notice you have vocational instructors and occupational aids, and so on, 14 people for 200 patients.

General WOOD. Yes.

Senator WADSWORTH. How many do you employ?

General WOOD. We have not any such number as that. We have a certain number of tests at the present time, but we contend that

carrying on any such work is not proper for a hospital. I think it looks at the present time like there is going to be a definite distinction between vocational training and occupational therapy.

Senator WADSWORTH. Are you not carrying on vocational training?

General Wood. No, sir; we did have a school at Dayton, and we had one at the Mountain Branch, but they were simply running to give our facilities to the Veterans' Bureau, and we were only helping out by letting them have Government property. We did not carry on the work ourselves. They were not on our pay roll at all.

Senator WADSWORTH. What were the others of the personnel. 130 in number?

General Wood. That would be including cooks, waiters, orderlies, dietitians, druggists, and that class of personnel—and janitors.

Senator WADSWORTH. Firemen and stationary engineers?

General Wood. No, sir; I do not suppose it would include them.

Colonel WADSWORTH. Yes; that would include operation work. That is a hospital proposition. It includes the entire personnel.

General Wood. I think your question led up to this, and I am glad it did so, because we intended to present it to your honorable committee, stating the situation we were in, the fact that our estimates were made before this was adopted by the committee of coordinators; and state that the estimate passed by the House would not provide for the personnel.

Senator WADSWORTH. As a matter of fact, you do not want that personnel, do you?

General Wood. You ask me a pretty hard question. As a layman I do not think it is necessary. It may be professionally necessary, but as a layman I do not think it is necessary.

Senator WADSWORTH. A layman who has had intimate contact with this business for a number of years becomes somewhat of an expert.

TUBERCULOSIS PATIENTS: TREATMENT OF.

Colonel WADSWORTH. May I just say that the home has now been caring for those under another estimate for a number of years? We have a complete hospital at Johnson City of about 1,000 capacity for treating tuberculosis patients. The acutely sick in the hospital would be called bed patients; those who are in bed the major portion of their time. They will not exceed 30 per cent. Usually it is a very much lower percentage.

The other 700 run down through all gradations, and probably 300, or another 30 per cent, the doctors will tell you they are holding under observation. They apparently are as well as any men can be, but at some stage or at some time they have had the taint of being suspicioned of being affected with tuberculosis. They are held under observation, but they go about. They do not require any nursing care further than taking their temperature. They do not require anything further than being well fed. It requires a very heavy diet, and they are good feeders.

The other stages, the acute stages require some form of rest; but there are not any of these people that you would think there was a necessity of increasing the attendance for, so as to get it up to anything like approaching those numbers. To use the expression of the

head of the department, he said if he got that much personnel he would have to invent polo or something to keep them occupied. I suspect that would work out as true in every one of our institutions. The necessity for increased occupation on the part of these people has been emphasized, and probably emphasized with the loud pedal a little too much, because they are taking in men and sending them to hospitalization of things that five years ago would not have sent men to a hospital or would not have put them under the ban for any position that required a reasonably sound man, so that our refinement in medical treatment is perhaps responsible for our increased personnel. We have got that to work against, and we have also a tendency toward specialization that will run from the cook to the head doctor, so that you have those two facts to deal with.

AMUSEMENTS.

Senator WADSWORTH. And there are the amusements?

Colonel WADSWORTH. The amusement proposition is, of course, one that is rather popular, and is one that appeals to the public, and I do not believe that any institution, however you might doubt the real benefit of it at the present moment, could ignore the fact that it has accepted as being a necessity, but I do think that all institutions would act wisely not to get too extravagant over it. But these reconstruction departments that come out are not any of them based on a man learning to do anything useful. You can not get one of those men to do anything useful. It is not that particular brand of therapy that they are looking for, but they do a lot of decorative stuff, making up a lot of baskets and things of that kind that no he-man would ever want to touch again after he gets away from there. They have an abundance of that. But around these places we have not been able to get a single man that would even go out and make a flower garden in front of the barracks, and we have not been able to get any real suggestion of that kind from any of these people from all this varied reconstruction work.

Senator LENROOT. May I ask one or two questions about another matter?

Senator WADSWORTH. Yes.

REMOVAL OF VETERANS OF CIVIL WAR FROM MILWAUKEE HOME TO DENVER.

Senator LENROOT. I would like to ask what is the present status with reference to the removal of the veterans of the Civil War from the Milwaukee Home to Denver. What change is there?

General WOOD. There is none.

Senator LENROOT. There is no change in that?

General WOOD. No, sir. There was a story about that, and I do not know why it occurred. I got to Milwaukee, looking over that big hospital they are putting up there, you know, and when I got there I found a coterie of newspaper reporters there who had the idea that we were there for the purpose of moving these men; and I made a memorandum about it and published it to all of them, saying that we had nothing to do with any such thing at all.

Senator WADSWORTH. Is there anything else?

Colonel WADSWORTH. Mr. Chairman, referring to the statement which you requested that I file, I am informed that this matter on page 333 gives the information that would be necessary to get at the changes, showing those three items under each one of the branches.

Senator WADSWORTH. All right, then we have it in the hearings. Is there anything else?

General WOOD. No, sir.

Senator WADSWORTH. Do you want to ask any questions, Senator Harris?

Senator HARRIS. No, sir.

Senator HITCHCOCK. Nor do I. I have not been through this.

Senator WADSWORTH. We have been talking mostly about four items that they want additions to.

Senator HITCHCOCK. These national soldiers' homes now admit veterans of the Spanish War as well as of the Civil War and of the World War?

General WOOD. Yes; of any war.

Senator HITCHCOCK. Has that resulted in increasing the attendance and the expenses?

General WOOD. Yes; both, Senator.

Senator WADSWORTH. That will be all, thank you very much, gentlemen.

What is next, Major Browne?

Major BROWNE. The next item is the Engineer Department.

ENGINEER DEPARTMENT.

STATEMENTS OF COL. F. C. BOGGS, ASSISTANT TO THE CHIEF OF ENGINEERS, IN CHARGE OF MILITARY DIVISION; MAJ. CLARENCE L. STURDEVANT; AND MAJ. THOMAS M. ROBINS.

Colonel BOGGS. The items for the Corps of Engineers under the military items, War Department, begin at line 24 on page 57.

ENGINEER DEPOTS.

The first item is engineer depots. The House bill carries a provision for engineer depots of \$110,000. The Budget estimate, as submitted by the War Department, for this item was \$125,000, and the House bill carries a reduction of \$15,000 under the Budget estimate.

I might say that the Budget estimate was based on original estimates from our office. The original estimates from the office of the Chief of Engineers were considerably in excess of the Budget, but that need not be gone into. When we were considering the Budget estimate of \$125,000 we apportioned the money as we thought it would be most advisable in operating the various depots which we have in the Engineer Department, and the House committee was informed that we at that time considered that it would be necessary to close certain depots if we had only the \$125,000. We told them that we would probably close the New York depot, the Norfolk depot, the Atlanta, the Chicago, and the San Francisco depots.

On reconsidering this, however, we have made another distribution of the \$125,000, assuming that we got that amount, based on

the fact that it now appears essential that those depots be maintained for various reasons. There is a good deal of surplus stock still in some of those depots which up to the present time has not been gotten rid of. There is also a great deal of stock that is used for current supplies. Now, if we closed down those depots that merely means that that current supply will merely have to be packed away until we can use it, and some other depot will have to be used for the supplying of the local troops. For example, our supplies to the Philippines would probably have to come from some of our eastern depots instead of using up the stock in San Francisco, and so forth.

Consequently, if the estimate is still further cut from \$125,000 to \$110,000, we may not only have to close those depots but decrease the operation of some of our others beyond what would be economical and to the best interests of the service.

Senator HARRIS. Colonel Boggs, may I ask why you would use the stocks from the depots on the Atlantic Coast for the Philippine Islands instead of the stocks from the San Francisco depot?

Colonel Boggs. If we were required to close the San Francisco depot we would have to use the stocks from some other depots, because we would not have the personnel to operate the San Francisco depot. So we came to the conclusion it was wisest to keep open the San Francisco depot and decrease the allotment to one of our other depots. But, as I said, if it is cut still further to \$110,000, as proposed in the House bill, we may have to close some of the other depots perforce.

NUMBER OF DEPOTS.

Senator HITCHCOCK. How many of these depots have you had during the current year?

Colonel Boggs. We have at the present time 10 depots, of which 1 is known as the Eighth Corps Depot, which consists of several subdepots—3 subdepots.

Senator HARRIS. Could you not combine some of those depots at a saving of expense?

Colonel Boggs. We might do that, but we have no money to move stocks. It would require a considerable amount of funds to move those stocks from some of those depots to some of the others which we are maintaining, and at the present time we have practically no money for transportation. We are very much handicapped at present by the lack of transportation funds.

NATURE OF STOCKS IN DEPOTS.

Senator HITCHCOCK. What do these stocks consist of?

Colonel Boggs. These stocks consist of various engineering materials, such as the standard equipment given to troops. For example, each engineer regiment has a carpenter equipment, surveying equipment, blacksmith equipment, etc., and some of the infantry regiments have certain equipment, some of the artillery regiments have certain equipment, and in addition to that there is a stock of material which we call field material, such as nails, rope, sandbags; then we have our pontoon equipment, all engineering supplies.

Senator HITCHCOCK. The troops only need to replenish what they have gotten from time to time?

Colonel BOGGS. They need to have what we call the supplies, as distinguished from the equipment, replenished as they use it in training. It must be replenished from time to time.

Senator HITCHCOCK. As they use it up how?

Colonel BOGGS. As they use it up in their training. For example, a carpenter's equipment will contain certain supplies in connection with it, pencils, chalk, etc., and as they use that material up in their training we have to supply them with new material for that purpose.

Senator HITCHCOCK. Is not that rather trifling on the whole?

Colonel BOGGS. It is not, Senator. It amounts to a fair amount. I can give you a figure on that. I did not mention all the different types of equipment that we have; some of them require more supplies than others.

Senator HITCHCOCK. Can you tell what amount of supplies will be issued during the current year to the troops? I mean the amount in money or in value?

Colonel BOGGS. We have not that figure. I doubt whether we could get it.

Senator HITCHCOCK. Could you approximate it?

Major STURDEVANT. We know the value of the equipment that the troops now have.

Senator HITCHCOCK. What is that?

Major STURDEVANT. The total cost of the initial equipment of the present organization of the Regular Army is \$546,000; that is the engineer equipment; and also \$105,000 expendable supplies, which is photographic equipment, lithographic equipment, explosives, and things that are used up in service.

Senator HITCHCOCK. Something over \$650,000 in the aggregate.

Major STURDEVANT. Yes, sir.

Senator HITCHCOCK. Would there be 10 per cent renewal in a year?

Major STURDEVANT. Yes, sir; we figure 10 per cent for replacement of the equipment that wears out; then we figure the authorized allowance of the expendable supplies is 100 per cent per quarter.

Senator HITCHCOCK. That would be \$140,000 a quarter?

Major STURDEVANT. That would be \$105,000 per quarter. However, we have not been issuing at that rate. That is the prescribed War Department allowance.

Senator HITCHCOCK. How are those supplies consumed?

Colonel BOGGS. Consumed in the training of the troops. For example, in our lithographic work we have to train certain soldiers in each organization to produce lithographs, and in doing that we have to use the material for their training. It is being used for practical purposes as far as possible.

Senator HITCHCOCK. Does that mean maps?

Colonel BOGGS. Yes, sir; maps; local maps; locally with the troops.

Senator HITCHCOCK. Do those supplies contain a great deal of reserve goods as the result of the war—these stores?

Colonel BOGGS. We have a good deal of material, but we are making use of all the surplus we can.

Senator HITCHCOCK. How were you able to get along with \$20,000 for this current year?

Colonel Boggs. In depots? That is only apparent. The depots have heretofore been operated under what is known as the inland and port storage appropriation; that is, up to last year.

Senator HITCHCOCK. Appropriated for under another head, in other words?

Colonel Boggs. Appropriated for under another head. I have the exact figures here. For 1921, \$21,500 for the maintenance of engineer depots was from the appropriation headed "Engineer depots," and \$80,000 was from the inland and port storage and shipping facilities, which is an appropriation which came under the Quartermaster Corps. In the case of the Engineer sections in the various depots those two expenditures, in total approximately \$100,000, cover payments of personnel only for six and one-half months of that particular fiscal year. In other words, \$100,000, made up of \$20,000 from Engineer depots and \$80,000 from inland and port storage, covered the payment of personnel for Engineer sections in various depots for only six and one-half months. All other operations were paid for by the Quartermaster. He operated these depots. In the middle of 1921 the depot scheme of the War Department was changed, and instead of the Quartermaster paying for all depot operation and operating the depots they were again divided among the different branches which were charged with certain supplies. For example, the Engineer material, which had theretofore been handled by the Quartermaster, was turned over to the Engineers and was segregated in Engineer sections.

So, in addition to the \$20,000 which we had last year, as I have shown, we had a certain amount from the inland and port storage, and that has been so this current year 1922. For next year the appropriation "Inland and port storage" will be cut out of the bill. There will be no heading "Inland and port storage," nor will the quartermaster handle any of the operations—

Senator HITCHCOCK. You mean this bill here?

Colonel Boggs. Yes, sir; nor will the quartermaster handle any of the functions connected with the engineer section, so this \$125,000 is the total amount we will have for the operation of our engineer sections of all these depots, the purchase of power, light, stationery, etc., as well as the actual handling of the supplies and the care of them and the keeping track of them in the usual way, inventories, etc.

Senator HARRIS. Would it not have been less expensive to have handled them under the quartermaster instead of having separated them?

Colonel Boggs. No, sir. As a matter of fact, it is much less expensive to handle it this way, because the quartermaster did not have the experts who knew this particular equipment. This is rather an exaggerated case, of course, but under the system everything was stored in connection with the particular item. For example, if you want to get a steam shovel together, you would not find the steam shovel in one place; you would probably find the rope in one place, the bucket among buckets, etc. That was incidental to that particular service at that time merely because they did not have the experts who knew the particular equipment. We have the experts who know the particular equipment, so I should say it is cheaper to run it in this way.

Senator HITCHCOCK. Do you know what reduction is made in the quartermaster's appropriation as a result of dropping this out of it?

Colonel BOGGS. I do not, sir.

Senator HARRIS. How many of these depots did you have five years ago, Colonel Boggs?

Colonel BOGGS. Well, if I may go back before the World War—
Senator HARRIS. Yes.

Colonel BOGGS. We had three depots at that time—one at Vancouver, one at Leavenworth, and one in Washington.

Senator WADSWORTH. How many do you think you need now?

Colonel BOGGS. During the time that we have this surplus material on hand, Mr. Chairman, I doubt if we can get along with any less than we have at the present time.

DISPOSITION OF SURPLUS MATERIAL.

Senator WADSWORTH. At what rate are you getting rid of the surplus material?

Colonel BOGGS. Will you give that in detail?

Major STURDEVANT. The Engineer department has sold about \$120,000,000 worth of surplus material, and has on hand now available for sale approximately \$9,000,000 worth of material.

Senator HITCHCOCK. Engineers' supplies?

Major STURDEVANT. Engineers' supplies: railroad equipment is the large item.

Senator HITCHCOCK. That was stored in these stations?

Major STURDEVANT. At the present time we have a large amount of railroad equipment at Norfolk only, and we hope to get rid of that very shortly and close up Norfolk depot. We will not need that depot after surplus stocks are disposed of.

Senator HARRIS. What are the prospects of getting rid of other material in other warehouses and closing them?

Major STURDEVANT. There is no large quantity in any other one of them. The only depot that is now being maintained solely on account of the surplus property is the Norfolk depot.

Senator HITCHCOCK. Would it be an economy if Congress gave you the money to transport this material and thereby shut up three, four, or five of these depots?

Colonel BOGGS. I believe not at present; next year it may. When we get rid of that surplus stock, I believe then it would. In specific reply to the question as to how many depots we should have, I should say the Schenectady depot should be maintained; the Columbus depot; the San Francisco depot; the depot in San Antonio, known as the Eighth Corps depot; and the three in the insular possessions and Panama—Philippines, Hawaii, and Panama.

Senator WADSWORTH. That is seven?

Colonel BOGGS. Seven; yes.

Senator WADSWORTH. As compared with—

Colonel BOGGS. As compared with 10 at the present time.

Senator WADSWORTH. As compared with 10 at the present time and 3 before the war?

Colonel BOGGS. Yes; as compared with three before the war in the United States; there were small stocks of supplies in the insular possessions and in Panama, but not dignified by the name of depots.

Senator WADSWORTH. You have three overseas depots?
Colonel BOGGS. We have now; yes, sir.

PRE-WAR APPROPRIATIONS.

Senator HITCHCOCK. Do you know the appropriation pre-war for those depots?

Colonel BOGGS. I have it here. In 1915 it was \$25,000; 1916, \$25,000, and a deficit of \$10,000 in 1916; 1917, \$27,000; 1918, \$35,000, etc. Of course, during 1917 and 1918 there was a good deal which does not appear in here on account of the fact, as I explained before, that a good deal of it came out of "Inland and port storage."

Senator HITCHCOCK. But, roughly speaking, prewar was \$20,000?

Colonel BOGGS. \$25,000. But may I explain in that connection, Senator, that before the war the Army was very well stabilized; all the organizations had their equipment and we were able to send out supplies probably in larger lots than we can now. In other words, we knew that an organization would be at a certain post for some time and we could probably send their supplies in larger quantities. At that time the National Guard was fairly well stabilized; they had their equipment; and, by the way, these depots are used for supplying the National Guard. The Organized Reserve was a reserve practically only in name and practically no supplies were sent to that reserve.

Also we did not have at that time, or only to a limited amount, the summer training camps, which must be supplied from somewhere, and we maintain in our depots the supplies for those camps—at least some of them. The Reserve Officers' Training Corps was at that time practically nonexistent. We now supply those from the depots, although the funds come from some other appropriation. Also the engineer organizations, which draw most of the supplies, are more numerous now both in the National Guard and the Regular Army than they were before the World War.

Senator HARRIS. How many of these depots belong to the Government? How many of the buildings, and how many are rented, and I would like to know the rentals paid and how much property in each one, and the number of employees, Colonel Boggs?

Colonel BOGGS. I can give you all that, but if I insert it in the record will that be sufficient, and not take up the time?

Senator HARRIS. Yes.

Senator WADSWORTH. That was not in the House record?

Colonel BOGGS. I think it is in the House record, and if it is in the House record may I refer to it by page?

Senator HARRIS. Yes.

Colonel BOGGS. And if it is not I will insert a statement. As I say, Senator, I can give you that information right now if you would like to have it, but it may take up a little time.

Senator HARRIS. I would not want to delay the committee too long. If you will briefly tell me.

Colonel BOGGS. All these are Government depots; none leased.

Senator HARRIS. The buildings are owned by the Government?

Colonel BOGGS. Yes. Therefore, that answers your first and second questions. The next was the personnel?

Senator HARRIS. The value of the property in each one and the personnel at each place.

PERSONNEL AT SEVERAL DEPOTS AND VALUE OF PROPERTY.

Colonel BOGGS. The personnel at Schenectady at the present time is 40, with a total pay roll of \$59,680.

Senator HARRIS. What is the value of the property?

Major STURDEVANT. The property is \$7,523,000.

Senator HITCHCOCK. That means on storage there?

Major STURDEVANT. Yes, sir.

Colonel BOGGS. At the Columbus depot the total number of employees at the present time is 15; total salary roll \$19,500; and the property—

Major STURDEVANT. The value of the property is approximately \$6,000,000.

Colonel BOGGS. I might say here, in explanation of the difference in the personnel, the property at Schenectady is of much more varied character than the property at Columbus. We have all our seacoast engineer supplies at Schenectady and practically none at Columbus.

At San Francisco the total number at the present time is five; pay roll \$5,800.

Major STURDEVANT. The value of the property, \$444,000.

Colonel BOGGS. At New York the personnel is nine; pay roll \$11,970; and the property is—

Major STURDEVANT. \$320,000.

Colonel BOGGS. San Antonio, which I have listed here as the Eighth Corps Area depot, as I explained heretofore, consists of three subdepots; San Antonio is the main depot, and has 12 at a total salary of \$15,000, and the value of the property—

Major STURDEVANT. The value of the property is approximately \$3,000,000.

Colonel BOGGS. I notice here that Major Sturdevant's value is noted at San Antonio, including subdepots, as \$3,000,000. I will therefore give the number of employes at the San Antonio depot, the El Paso, Brownsville, Laredo, and Fort Sill, which corresponds to that property, in place of the number I gave before. It is 19, and the total salary roll is \$23,895.

At Norfolk there are four, total salary roll \$6,000, and property of \$7,325,925.

At Chicago there are four, with a salary roll of \$4,600 and a property of \$395,185.

At Panama there are four, with an unknown number of laborers who are employed there incidentally as they may be needed; total salary roll, \$9,975. We have not the value of the property at Panama.

At Hawaii we have one clerk at \$1,500. I have not the value of the property there.

The Philippines, two; total salary roll of \$2,000; I have not the property value there. I might say a large amount of that property is under the department commander, and we would have to get it from him.

Senator HITCHCOCK. What is the total of the property at all those stations? Have you the footing there?

Colonel BOGGS. The total value of the property is \$25,008,000.

Senator HITCHCOCK. You testified, as I recall it, you had about \$9,000,000 of surplus.

Colonel Boggs. Yes, sir.

Senator HITCHCOCK. That should be deducted from this \$25,000,-000, should it?

Colonel Boggs. No; this includes the surplus property. This property includes not only the surplus property but the property which is set aside for the use of the Regular Army, the National Guard, and the Organized Reserve, and the reserve property under the War Department scheme.

Senator HITCHCOCK. So for issue you have something like \$16,-000,000 worth of material?

Colonel Boggs. Yes, sir; and, as I say, that includes not only the current supplies but the reserve supply under the War Department scheme.

Senator HITCHCOCK. How long will that \$16,000,000 worth of material last?

Colonel Boggs. Well, if there is no emergency that will last quite a long while; the principal items. A great many of these items are retained, as I say, under the War Department scheme to meet any emergency that might arise.

Senator HITCHCOCK. Last seven or eight years?

Colonel Boggs. Some of it will last much longer than that, if there is no emergency. We have a great deal of pontoon material. That pontoon material, for instance, is of but little value for sale but of inestimable value for emergency, because it takes so long to replace it. In handling our reserve supply under the War Department scheme we maintain only a reserve of material which would require an appreciable time to replace.

ENGINEER EQUIPMENT OF TROOPS.

Senator HITCHCOCK. Is there in this bill an appropriation for additional supplies for these depots?

Colonel Boggs. Yes; we have in one or two of the other items.

Senator HITCHCOCK. What do they aggregate?

Major STURDEVANT. \$100,000 for engineer equipment of troops, part of which will be expended for supplies.

Senator WADSWORTH. That is the estimate.

Colonel Boggs. Yes, sir; that is the estimate. The House bill provides \$85,000. I might say that does not provide for material we have on hand now; it does not provide for increasing our reserves in any items.

Senator HITCHCOCK. It is just some special material?

Colonel Boggs. It is just some special material that we have not at the present time and which will be needed in the training of troops.

Senator HITCHCOCK. Did you give an estimate of what is normally required by the Army year by year of these materials and supplies?

Colonel Boggs. These figures are based on the "before the war" data when our Army was on a stabilized basis and training was going on in a stabilized manner, and, therefore, it is rather hard to say that they would absolutely apply again next year; but we have every reason for believing when the Army does get to a stabilized basis that they will apply. The infantry regiments, for example, the total cost of 100 per cent of supplies was \$964 for each infantry regiment, and for each artillery brigade was \$42, for each engineer com-

bat regiment was \$5,584; that is supplies only. Now, based on the pre-war use of the supplies it would have been for our present Army \$400,000 for supplies only.

Senator HITCHCOCK. If that is the case, \$16,000,000 worth on hand would last some time?

Colonel BOGGS. That material does not consist of supplies that we use from time to time. As I explained, that material is largely material which can be stored and kept and which not only does not deteriorate but which is kept to be used in case of an emergency. That amount covers practically none of what we call current supplies—that is, supplies used for training in lithography, for the training in photography and training of carpenters, etc.

Senator HITCHCOCK. When you say \$400,000 are you only including consumptive supplies.

Colonel BOGGS. Yes, sir.

Senator HITCHCOCK. I am trying to get an estimate of—

Senator WADSWORTH (interposing). The wastage of equipment?

Senator HITCHCOCK. The wastage of equipment at the present size of the Army.

Colonel BOGGS. Well, we estimate that of the equipment we will have to replace each year about 12 per cent of the total value of the equipment. For the entire Regular Army as at present organized it is \$546,756; or we contemplate a yearly turnover of \$66,000.

Senator HITCHCOCK. That \$66,000 added to \$400,000 that you spoke of consumptive supplies, amounts to less than \$500,000?

Colonel BOGGS. Yes, sir; that is for engineer equipment and supplies only.

Senator HITCHCOCK. And I understand you have engineer supplies on hand \$16,000,000 that you are keeping and \$9,000,000 worth that you expect to sell.

Colonel BOGGS. The material that we are keeping does not include the current supplies, because we have none of that in our depots.

Senator HITCHCOCK. We have put together now the consumptive supplies amounting to \$400,000 and the wastage of engineer equipment amounting to, say, \$75,000.

Colonel BOGGS. Yes, sir.

Senator HITCHCOCK. And we have reached a total of only \$475,000 in both of them?

Colonel BOGGS. Yes, sir.

Senator HITCHCOCK. Why are we keeping so much as \$9,000,000 worth of supplies?

Colonel BOGGS. Well, we are keeping under those figures \$16,000,000 worth of material.

Senator HITCHCOCK. I mean \$16,000,000.

Colonel BOGGS. \$16,000,000 worth of material is to equip the Army which might be called out in case of an emergency under the War Department scheme for reserve supplies. As I explained, we have a great deal of pontoon material, which, if you allow it to be used merely to replace broken material, might last for 100 years or more; but this material is on hand, it is of practically no value in a commercial sense, it can not be manufactured promptly in case of an emergency, and under the War Department scheme we are holding this pontoon material for equipment in case of an emergency. That

is the general War Department scheme, which either has been or will be fully explained to you by the Chief of Staff and the members of the General Staff when they appear. I personally would prefer not to go into that general scheme, because they are much more fully acquainted with it and with the reasons for it than I am.

Senator HITCHCOCK. How many consumptive supplies have you?

Colonel Boggs. We have practically no consumptive supplies.

Senator HITCHCOCK. But \$100,000 is appropriated for that?

Colonel Boggs. We asked for \$100,000, or the budget was for \$100,000, but we received only \$75,000. That is another one of the items and is something I wanted to take up a little later.

Senator HARRIS. Colonel Boggs, you do not think you can get along on the \$110,000?

Colonel Boggs. I do not think we can get along on the \$110,000; no, sir. We can not operate the depots and supply the troops and do it economically—as economically as we could with \$125,000. We would have to close some of the depots, which would mean the goods would have to be stored with no one to take care of them—no one to keep them in condition. There would be wastage and destruction. We would have to send material from depots at a farther distance from the unit to be supplied than we otherwise might be able to; and we believe that in the end the \$125,000 for the depots will be more economical to the Government than the \$110,000.

Senator HITCHCOCK. Many of those depots which you read the figures on a while ago had a comparatively small amount of material in storage.

Colonel Boggs. I think none of them ran below \$300,000.

Senator HITCHCOCK. Yes; a number of them did. Why could not those small ones be transferred to the larger ones?

Colonel Boggs. We could do that, but we have no money for transportation.

Senator HITCHCOCK. But it would cost much less to transfer them, would it not?

Colonel Boggs. There is some question as to whether it might not cost more to transfer them even if we had the funds and then transport the materials back to maybe the same place to supply the troops, than to maintain the depots. The cost in each one of those places is small; \$5,000 in salaries and the balance in freightage, supplies, etc., which would also have to apply to the other depot.

Senator WADSWORTH. What is your next item?

ENGINEER SCHOOL.

Colonel Boggs. The next item is Engineer School, I believe.

Senator WADSWORTH. That, I assume, is the school at Camp Humphreys?

Colonel Boggs. Yes, sir. We are not asking for any modification in the House bill for the school at Camp Humphreys.

Senator WADSWORTH. Very well.

ENGINEER EQUIPMENT OF TROOPS.

Colonel Boggs. For engineer equipment of troops the House bill provides \$75,000; the Budget estimate was \$100,000. In handling the distribution of that we figure that we would be able to furnish

only a part of the material that is actually required by the troops. As explained before, we count on 12 per cent depreciation in equipment and approximately \$400,000 for a full yearly complement of supplies. Consequently if we receive only the \$100,000 we would be able to furnish only a small portion of the supplies themselves. We figured that we would be able to furnish only 10 per cent of the authorized allowance of expendable supplies if we received our \$100,000. There is a small amount of initial equipment still needed which we have not in our reserve. Those are small items that have been exhausted, some blacksmith chisels, etc., planes, drafting instruments, etc.—items we do not have in our reserve stock, nor do any of the other departments have them.

Under this item also comes an item for design and development of new equipment. We are now developing our pontoon equipment, which must be modified in view of the conditions developed during the war. We are developing searchlight equipment; we are developing field lithography equipment; we are developing water-supply equipment—that is, purifying equipment, etc. That is only a small amount.

Then another item in this original \$100,000 was for the allotment roll in the office of Chief of Engineers. We carry on a great deal of the work in that office. The supply section is in that office, and we estimate we would need \$26,000 from this original estimate of \$100,000 for the allotment roll in the office of Chief of Engineers.

The reduction to \$75,000, if that goes through, merely means that we will not be able to supply the troops, and they will not be able to get their proper training even up to the amount that we had originally estimated.

Senator WADSWORTH. How much do you think you will spend in the current year? The appropriation is \$145,000.

Colonel Boggs. Of the \$145,000, \$15,000 was reserved on the books of the Chief of Finance as a reserve, so it left us only \$130,000. On the last of February we had spent \$52,000 of that; obligated \$52,000.

Major STURDEVANT. We have unobligated on February 12 \$77,813.39.

Colonel Boggs. We contemplate that we will have to use the entire balance of that appropriation during the balance of this year.

Senator WADSWORTH. You have spent \$52,000?

Colonel Boggs. We have spent \$52,000. I can explain the discrepancy between the amount spent in the first half and the amount spent in the second half very readily. In the first half of the year, during the summer, we did not know what our appropriations would be, and therefore expenditures on all items, as a matter of fact, were held down to the absolute minimum. We were not supplying. Then during the winter months, of course, our requirements on these lines are much less than during the summer. We now approach the summer months and the encampments, etc., and this amount will be needed to lay in stock required for these encampments and the work during the summer.

Senator WADSWORTH. Then you are going to spend the \$77,000?

Colonel Boggs. We expect we will have to; yes, sir.

Senator WADSWORTH. That is all obligated then?

Colonel Boggs. That is obligated; that is, some of it. This report I gave you was the 1st of March, and we have obligated some since

then, but we have not all our reports, and I gave you the last complete report rather than an incomplete one.

Senator HITCHCOCK. Going back a little, Colonel, what is it costing us in salaries, rents, etc., to carry this big reserve that we are carrying for war purposes?

Colonel BOGGS. For rents in the Engineers? We have no rental.

Senator HITCHCOCK. Salaries and other items. What is it costing to carry it, if you have any estimate?

Colonel BOGGS. That comes under the Engineer depots. I should say out of those appropriations—

Major STURDEVANT (interposing). I do not know that I understand the question exactly.

Senator HITCHCOCK. Well, we are carrying \$16,000,000 worth of reserve and \$9,000,000 worth that we are going to sell. Now, what is it costing us to carry that great store of engineering material?

Colonel BOGGS. Well, all of it, Senator, comes under the Engineer depots, for which we want \$125,000.

Senator HITCHCOCK. Does that include everything?

Colonel BOGGS. Yes; at the depots. That is one item. Then the other item is salaries in the office of the Chief of Engineers. The total amount for that purpose would probably be about \$30,000, would it not?

Major STURDEVANT. Just as a rough estimate, I would say, if we did not have that large stock we might run our depots for \$75,000, as against \$125,000; that would be fewer depots, but this depot personnel is used for issuing supplies, packing supplies, and checking supplies and shipping.

Senator HITCHCOCK. Then it costs us \$75,000 a year for depots from which we distribute about half a million dollars' worth of goods a year to troops?

Major STURDEVANT. Our figures we gave did not include the issue to the National Guard at all, and that is much greater than to the Regular Army.

Senator HITCHCOCK. Well, to the Regular Army, to 150,000 men, it costs us \$75,000 to operate depots for the purpose of distributing half a million dollars' worth of supplies to troops.

Colonel BOGGS. The \$75,000 is used not only for distributing to the Regular Army but to the National Guard and Organized Reserve.

Senator HITCHCOCK. It includes not only distributing to the Regular Army but to the National Guard?

Colonel BOGGS. Yes; and the amount given, approximately half a million dollars worth, is for the Regular Army only.

Senator HITCHCOCK. What would it be if we included the National Guard and the other purpose?

Colonel BOGGS. I could not say at this time, because we have not gotten down to a stabilized basis as yet.

Senator HITCHCOCK. That is going up as the Regular Army comes down?

Colonel BOGGS. Yes, sir; that will go up undoubtedly.

Major STURDEVANT. Our principal activities now are supplying the National Guard, because they are in the formative stage and they are all calling for equipment.

Senator WADSWORTH. What else?

CIVILIAN ASSISTANTS.

Colonel Boggs. Civilian assistants. There is nothing to speak about.

ENGINEER OPERATIONS IN THE FIELD.

Colonel Boggs. Engineer operations in the field is one of the other items. The Budget estimate for engineer operations in the field was \$117,500. The House carries an appropriation of \$85,000 for that item.

That appropriation is used for supplying certain materials for the training of troops not included under the head of engineer equipment of troops. As I explained before, engineer equipment of troops comprises certain standard materials, certain standard equipment, which is issued to each of the organizations. In addition to that, we have to have certain construction materials which are used in training Engineer troops and all other troops. These consist principally of such items as lumber, cement, sand, gravel, nails, structural steel, certain machinery and tools and material of that kind to train the troops in the field, as against the training in the use of any particular equipment.

This item is divided into \$35,000 for salaries, of which a certain amount is again chargeable to the allotment roll, Chief of Engineers; the Infantry School asks for a certain amount of training of troops at the Infantry School, the Infantry students; then at the Field Artillery we are asking for a certain amount for Field Artillery School; at the Cavalry School also; at the Engineers' School; and there is a large item for the expenses of corps area engineers. That might require a little explanation.

As you know, the country is divided into corps areas. Each corps area commander is charged with the training of the troops in his particular area, and to each corps area is assigned an engineer officer in addition to his other technical assistants. That engineer officer stands in relation to the corps area commander largely as the Chief of Engineers in the military sense stands to the War Department. He advises in regard to engineering matters and training, and also supervises that training. There are certain functions which are assigned to this corps area engineer. In connection with that work he must keep track of certain supplies which have been turned over to the troops. He must keep track of certain reserve officers and he has certain maps and surveys to make. Those are made from this appropriation for engineer operations in the field. That is the particular item that I mentioned, expenses for corps area engineers. The estimate for next year under that particular head is rather small, \$18,000. One of the principal items is the operation of the engineer reproduction plant at Washington Barracks, and that brings up the question of the use of that plant and why we need the amount of money that we do therefor.

CIVILIAN ASSISTANTS.

Senator HITCHCOCK. Before you go to that, will you let me ask you, Colonel, why do these officers who are themselves engineers require these civilian assistants?

Colonel Boggs. Because no officer is able to do all the work that is called for. For example, if an officer spent his time drawing a

certain particular plan he could not be spending his time in supervising some other work.

Senator HITCHCOCK. There are junior officers?

Colonel Boggs. Yes, sir; but we have not enough officers to send out for this purpose. As a matter of fact, we have not enough officers in the Corps of Engineers to anywhere near fill the requirements which are being made on the Corps of Engineers—can not begin to.

Senator HITCHCOCK. Can not the Regular Service do some of this work that is being done by civilians, survey parties, and draftsmen, etc.?

Colonel Boggs. The Regular Service is doing some of the work, but if you were to take the soldiers for that work and distribute them around you would break up the training of the particular organizations, and it is cheaper to employ civilians for that purpose. Moreover, we have not the technical men among the enlisted men at this time for that purpose. We do not have them.

Senator WADSWORTH. How short are you of officers?

Colonel Boggs. We figured the other day that to fill all functions that we are called on to fill we would require about 680 Engineer officers; that is, in round numbers. At the present time we have approximately 500, but of that number you might say that at least one-third are not able—one-half probably are not able at the present time to fill all duties to which, under the varied functions of the Corps of Engineers, they might be assigned. The Engineers have not only their military work but their civil work. The men who come in from the Reserve and have been brought in since the national defense act are all good engineers, but many of them have not had the military training, and they could not be assigned to military positions. Some of the men recently graduated from West Point can handle the military end, but they are not at present engineers. Therefore you can not say that, having 500 officers, we have the use of 500 officers, because many of them are still receiving training. If we were to fill the positions which we are called on now to fill we should have something like 680 trained Engineer officers.

Senator WADSWORTH. What are the principal demands that you can not fill?

Colonel Boggs. We can not furnish enough men to fully man our troops. Under the organization we have a certain number of officers assigned to each regiment, which is the number properly required to take care of and train that particular regiment. In many cases we are not able to furnish more than one-third of the field officers required and, possibly, not more than 60 per cent of the junior officers. We are being called on continuously for officers for duty with the National Guard and Organized Reserve, and up to the present time we have been practically unable to furnish any. Under the War Department scheme for next year we will probably be called upon to furnish 125 officers for National Guard and Organized Reserve, and up to the present time we have not been able to find where we could get more than possibly 25 or 30 for that work. Of these 500 officers only 25 per cent have had more than 10 years' service, and about 62 per cent have had less than 5.

Senator WADSWORTH. Less than five years' service?

Colonel Boggs. Less than five years' service. In other words, although we have 500 in the corps we might say there are not more than, at most—I do not think it will reach that number—but, at most, not more than 250 who could be assigned to all positions under the Chief of Engineers.

Senator HARRIS. You have nearly doubled the corps since before the war?

Colonel Boggs. We have nearly doubled the corps since before the war; yes, sir. We have also increased the number of Engineer regiments and the demands for Organized Reserve and National Guard, and when we have these officers trained, after the training is completed we will have not so much trouble in filling the positions.

Senator HITCHCOCK. Under this head of civilian assistants to Engineer officers the appropriation is \$45,000. How many employees does that contemplate?

Colonel Boggs. Twenty-five.

Senator HITCHCOCK. Can you tell me the prewar appropriation for this item?

Colonel Boggs. The prewar appropriation was the same—1914, \$40,000; 1915, \$40,000; 1916 was \$50,000; 1917, \$75,000; 1918, \$75,000, etc. In other words, the prewar appropriation was the same as the House carries, \$40,000, although I might say that the work has been increased on account of the increase in the number of different headquarters. Before the war I think there were seven departments. At the present time there are nine corps areas and three departments. In other words, we are only asking as much now for 12 separate headquarters as we had before the war for 7; also increased expenses.

Senator HITCHCOCK. Are these civilian assistants of Engineer officers all in the District here?

Colonel Boggs. No, sir; none in the District.

Senator HITCHCOCK. Under the heading of "Engineer operations in the field"—that seems to be another heading.

Colonel Boggs. That is under another head.

Senator HITCHCOCK. It goes to civilian assistants?

Colonel Boggs. It may be used for civilian assistants.

Senator HITCHCOCK. How do you distinguish between these two items, one being civilian assistants to Engineer officers in the field, and this one being Engineer operations in the field?

Colonel Boggs. Civilian assistants to Engineer officers in the field—there is no trouble about that, because that is only applicable to the payment of civilian assistants of Engineer officers. That has been used and is now used for civilian assistants outside of Washington. The other heading, "Engineer operations in the field," is a heading which may be used for the payment of civilian assistants or may be used for other purposes, as the wording of the bill indicates. We are paying out of that operation in the field certain civilian assistants in the office of the Chief of Engineers—clerks, etc.

Senator HITCHCOCK. Should not this item of \$40,000, therefore, be increased by a considerable amount?

Colonel Boggs. Well, I can give you in regard to the operation in the field a more detailed statement of the personnel employed under that heading. For example, under the engineer operations in the

field we are allotting \$26,000 in salaries to the Office of the Chief of Engineers. In the Infantry School we are allotting \$1,000 for the use of a clerk there; at the Engineer School another \$1,000; at the Engineer Reproduction Plant we are allotting \$15,000 for the payment of wages; at the Engineer Museum \$1,000 for a caretaker, and then for corps areas and departments applying it to practically similar work as the use of civilian assistants to engineer officers we are allotting \$5,000 for salaries and \$2,000 for wages. So the total amount of salaries and wages from engineer operations in the field is \$35,000 for salaries and \$25,000 for wages, the large part of which is in the Office of the Chief of Engineers and at the reproduction plant.

Senator HITCHCOCK. I am trying to get at the aggregate for civilian assistants to engineer officers.

Colonel BOGGS. Well, \$40,000 plus \$7,000—\$47,000.

Senator WADSWORTH. Then under the engineer operations in the field about \$7,000?

Colonel BOGGS. \$7,000 is in our preliminary allotment assigned to civilian assistants to engineer officers; but, as I have already noted, this appropriation of \$40,000 is the same as it was before the war, despite the increase in the number of headquarters that are taken care of.

Senator WADSWORTH. What was your prewar appropriation under engineer operations in the field?

Colonel BOGGS. The prewar appropriation 1917 was \$100,000, then a deficiency of \$94,000,000 during the war; 1918 was \$300,000 plus a deficiency of \$256,000,000.

Senator WADSWORTH. Have you not it for 1915 and 1916? Those are really the significant figures. Beginning 1917 and 1918, of course, all calculations are thrown aside.

Colonel BOGGS. No; I haven't that. This item was not carried previous to 1915. This engineer operations in the field was not carried previous to 1915.

Senator HITCHCOCK. Well, have you 1915?

Colonel BOGGS. Yes, sir; \$1,200,000 deficiency.

Senator WADSWORTH. In 1917 you had \$100,000?

Colonel BOGGS. In 1917 we had \$100,000, and then the deficiency began at that time.

Senator WADSWORTH. You now ask for \$117,500?

Colonel BOGGS. We now ask for \$117,500, and I do want to make a plea for that on account of the reproduction plant. Our engineer reproduction plant at Washington Barracks is largely dependent on this appropriation. We require for the operation of that plant out of appropriations about \$60,000. We will have, even with the estimate we made of \$117,000, not anything like that amount. We will have, I think, only about \$38,000.

That plant is used for the reproduction of all the maps used in the Army—practically all except the local maps, which are made by troops in connection with their training, and which really are not maps in the real sense of the word; they are reconnaissance sketches rather than maps.

Senator WADSWORTH. How is that distinguished from the appropriation for military surveys and maps?

Colonel Boggs. A portion of that is also used for the engineer reproduction plant, and it is also used for the surveys in connection with the military maps, as is also a certain portion of this operation in the field.

REPRODUCTION OF MAPS.

Senator HITCHCOCK. What is the idea of reproducing all these maps?

Colonel Boggs. The maps are absolutely essential in the training of troops. For example, you send your troops out to a certain area; and if you have not a map of that area you can not get out your problems; you can not get out your march problems and fire problems, etc., without maps on which to base those problems and without maps for the troops to use in connection with working out those problems. The training of troops, it has been somewhere said, is 50 per cent dependent on maps, and I do not know that that is not an underestimate.

Senator HITCHCOCK. They are largely drawn in the engineers' office?

Colonel Boggs. They are drawn from various sources. The Geological Survey are now preparing their maps so that they can be used for the Army. We are having many maps made by the Engineer troops themselves. Those maps drawn by the troops, and in some cases the Geological Survey maps, are reproduced in our plant down here, which also does a great deal of other reproduction work. For instance, that reproduction plant did a great deal of work for the Limitation of Armament Conference; quite a good deal of work for them, but not out of these appropriations.

Senator HITCHCOCK. Confining it to this particular service, how many maps, for instance, are reproduced? Is it a large number of maps?

Colonel Boggs. During the war it was stated that the Allies turned out something like 50,000,000 maps, just showing the need during the war. At present, of course, we are not turning out anything like that amount, but we are turning out a great many for the use of the troops and for various purposes, headquarters, etc.

Senator HITCHCOCK. When you say "a great many," do you mean a thousand a year?

Colonel Boggs. I have the figure here. The reproduction plant averages for one week approximately 102 plates and 116,000 impressions. That is the Engineer reproduction plant at Washington Barracks. There are various maps turned out. We have our standard maps—

Senator HITCHCOCK. Why do they have so many impression?

Colonel Boggs. There is a large distribution of maps required for various purposes. We have also miscellaneous photolithographic work done by the Engineer reproduction plant, including recruiting posters, insignia cards for The Adjutant General's Department, range targets, charts of tanks and tractors, diagrams for the yards and docks in the Navy Department. Some of these are paid for, not out of this appropriation, but out of other appropriations.

Our work which is properly applicable to this particular appropriation item includes reproduction by photostat or lithograph of

maps and similar matter for general use for the chiefs of the different branches of the War Department.

It is also, I might say, used as a school of instruction for training lithographers. We have at the present time in the Engineer service the topographic battalion, one company of which is to be trained as lithographers. Those men are rather scarce in civil life and in time of emergency we found we were unable to supply the number from civil life necessary to carry on the lithographic work.

Senator HITCHCOCK. How many men are employed in this plant at the present time? I understand the expenditure is \$60,000 a year.

Colonel Boggs. Well, \$60,000 a year from these appropriations, but in addition we do certain work which is paid for out of other appropriations, probably amounting to about \$50,000 in addition. The total number of employees is about 70.

Senator HITCHCOCK. That figures up about 5,000 maps or prints a year that come out of it. Now, what is done with it when one of these maps comes out?

Colonel Boggs. It depends largely on the purpose, Senator.

Senator HITCHCOCK. Suppose it is a topographical map.

Colonel Boggs. For example, suppose we take Camp Meade. We will probably have a summer camp at Camp Meade. At the present time we have no survey of Camp Meade which can be used for maneuver purposes. If we were able to have that survey, made and maps distributed, there would probably be several thousand maps distributed right at Camp Meade.

Senator HITCHCOCK. What would they be used for?

Colonel Boggs. For the purpose of training the troops. They would be distributed not only to the headquarters of the organization there, but they would be distributed to the Infantry headquarters, Artillery headquarters, to smaller units, and to individual officers for working out their problems, etc.

Senator HITCHCOCK. That would account for one map. Now you are bringing out 5,000 prints.

Colonel Boggs. As I say, at Camp Meade you might figure 1,000 there.

Senator HITCHCOCK. That is, impressions? You say you are turning out 102,000 plates a week.

Colonel Boggs. One hundred and two plates.

Senator HITCHCOCK. One hundred and two plates a week and 116,000 impressions.

Colonel Boggs. Yes; that accounts for some of them. Now you have a camp at some other place. We do the same thing there. You have certain regions where the Artillery is located, our coast defenses. We make detail maps around those particular defenses in order that the Coast Artillery may be able to handle their fire control in those particular areas in the most efficient manner. Those maps are issued in great detail because the officers use those maps in their local problems. The map is not retained in many cases; it has to be used in connection with the local problem; then that means another impression may be needed later on.

Major Robins may be able to give you some information on that.

Senator HITCHCOCK. The number appalls me—five thousand a year. I can see how there possibly could be a few hundred used.

Colonel Boggs. Senator, that also includes other work we do for other departments. This total number of impressions I gave you includes the work we do for other departments which does not come out of these appropriations. They give us the money for that work we do for them.

Senator HITCHCOCK. We have appropriated for them in another place, so it costs \$110,000 a year.

Colonel Boggs. Just take recruiting posters. They are distributed all over the country.

Senator HITCHCOCK. There will not be so many of those if we reduce the Army.

Colonel Boggs. I do not know. We can not tell just what is going to happen, whether the Army will be filled or whether it will not be filled. If it is not, we will have to have a recruiting campaign to bring it up. And, moreover, these men go out from time to time. You have to keep up a continuous recruiting campaign.

Senator WADSWORTH. There is always an impression that if you reduce the size of the Army you stop recruiting. It is the silliest impression. You must keep up recruiting always.

Senator HITCHCOCK. How many posters are required for recruiting?

Colonel Boggs. I can not say.

Senator HITCHCOCK. Probably 50 posters would cover it all.

Major ROBINS. Oh, no.

Senator WADSWORTH. All recruiting stations.

Senator HITCHCOCK. I mean the plates, not the impressions.

Senator WADSWORTH. The impressions are taken from the plates.

Senator HITCHCOCK. I mean 50 plates.

Senator WADSWORTH. I thought you were talking about impressions.

Senator HITCHCOCK. They are making 5,000 plates a year.

Colonel Boggs. Major Robins can explain that.

Senator WADSWORTH. One hundred and two a week.

Senator HITCHCOCK. That is over 5,000 a year.

Major ROBINS. I might say a great many of those plates are confidential plates for the General Staff, and those plates are filed away for future use; filed there just like you file books in a library waiting for the emergency to arise to pull the plates out and produce a map in quantities from the plate. That plate is the positive of all these confidential maps used in cases of trouble. Some of those plates are large and some small.

Senator HITCHCOCK. That is on the theory we are going to invade some country?

Major ROBINS. All those maps are not tactical maps.

Colonel Boggs. Let me read a little bit more in detail some of the work that is done down there. I limited it largely to the work done under this appropriation of \$60,000.

Senator HITCHCOCK. I have added the \$50,000, understand, making it \$110,000.

Colonel Boggs. But I did not read the work we were doing for other people. I confined my work to the \$60,000. Let me read some of the things we are doing for other people. We are doing miscellaneous photolithographic work, recruiting posters, insignia cards

for The Adjutant General's Department, range targets, of which we make a great many, charts of tanks and tractors, diagrams of yards and docks in the Navy Department, illustrations in color of machine guns for the Navy and War Departments, range tables, scholastic tables, illustrations for insertion in publications of the different branches of the War Department where it is an authorized publication, and also miscellaneous lithographic work required by the various chiefs of branches of the Army, test tables, etc.; those are the general uses.

Senator WADSWORTH. Do you do the photostat work on correspondence?

Colonel BOGGS. We do some for our own correspondence.

Senator WADSWORTH. For your own correspondence?

Colonel BOGGS. Yes, sir.

Senator WADSWORTH. Is that done at this plant?

Colonel BOGGS. Not all of it; I think very little of it, as a matter of fact. There is a small photostat machine in the office of the Chief of Engineers. We do a great many of the maps, of course, down there; a great many of the photostat reproductions of maps, but not correspondence.

Senator HITCHCOCK. Colonel, have you figured on the possibility of reducing the number of employees from 70?

Colonel BOGGS. We are figuring on reducing the number of employees by the use of these enlisted men that I spoke to you about as being under training, but I doubt whether we will be able to reduce the number of technical employees very much, and if we carry on that work the way it should be carried on we could not reduce them much below 70.

Senator HITCHCOCK. It is a large number of men.

Colonel BOGGS. If this work was done outside, we would pay out considerably more than twice what we are paying down there for it.

Senator HITCHCOCK. Would it not be that you simply would not have so much work done—preparing for the impossible or possible future—which would not be done at all, and we would be saving money?

Colonel BOGGS. It might not; and in case the emergency arose the results might be very sad.

Senator HITCHCOCK. Was this a pre-war institution?

Colonel BOGGS. There was a small plant before the war; yes, sir.

Senator HITCHCOCK. What was the pre-war appropriation for this, instead of the \$60,000?

Colonel BOGGS. I do not believe I could tell you that.

Major ROBINS. It was in connection with the Engineer School before the war. The plant consisted of one power press, I think, that was bought about 15 years ago. Before the war we did not have the organization in the Army that we have now, and the demands now are entirely different from what they were before the war. The war opened the eyes of the Army to what they needed in the line of maps.

One thing else; we print for the Ordnance large quantities of targets, as Colonel Boggs has mentioned. They are these landscape targets, pictures of the fields and country.

Senator HITCHCOCK. They are beautiful; but I wonder if they are necessary.

Senator WADSWORTH. You can not train troops without them.

Major ROBINS. You can not train troops without them, and if the Ordnance went outside to get the maps printed under contract, like the General Land Office is doing for their maps of the United States, we would pay 30 or 40 per cent more. We do it at cost.

Colonel BOGGS. I am going to interrupt right there to say that before the war a great deal of the work that is being done now at the reproduction plant was done by outside firms and at a considerable increase over what we are doing it for now. I imagine all The Adjutant General's recruiting posters were purchased outside—I know they were.

Senator HITCHCOCK. The cost of maintaining that is \$110,000 per year and 70 men employed.

Colonel BOGGS. Yes, sir; and as a result we get all the map printing required by the Army at a much less rate than we would outside, and we are also—and this is a very important point—training men in lithographic work, so that in case of emergency we will have a nucleus to draw on which we did not have when the World War started.

Senator HITCHCOCK. When you say "training," you mean those lithographers?

Colonel BOGGS. Lithographers.

Senator HITCHCOCK. Of course you have a big appropriation for printing.

Colonel BOGGS. Yes; we do do printing there.

Senator WADSWORTH. You print maps?

Colonel BOGGS. We print maps, but do not print in the ordinary sense of the term.

Major ROBINS. Take those range tables; we do work that if done at the Government Printing Office would cost a lot more money; you know, all these mathematical calculations with signs and symbols.

Senator HITCHCOCK. Can you tell me what the printing of those range tables amounts to—how many are printed or lithographed?

Major ROBINS. I imagine we do \$4,000, \$5,000, or \$6,000 worth of work a year for the Ordnance Department on those range tables alone. The beauty is when you lithograph it—the Ordnance, in their own office, write these upon the typewriter and they are all checked, and when we lithograph it there is no proof reading at all. If it is right when they give it to us, we photograph it and print it, and that is all there is to it. If it had to be proof read and set up in type, there would be a lot of chances for mistakes. That is the advantage of the lithographic process over the printing process for work of that kind.

Senator HITCHCOCK. Where are these ranges that the Ordnance Department requires you to make range tables for?

Major ROBINS. They are range table for guns.

Colonel BOGGS. The range tables mean translating into figures the characteristics of the gun.

Senator HITCHCOCK. They are experimental tables?

Colonel BOGGS. No; after the experiments have been completed and the guns produced.

Senator HITCHCOCK. Of course, we are producing very few now!

Colonel Boggs. We are producing very few now, but we are working up range tables. Most of our guns have not range tables prepared for them.

Major ROBINS. Every time you vary the powder charge you have to get up a new range table. Take a 155-millimeter howitzer, it has four or five different powder charges and they are constantly changing the size of those charges to get a different fire. If they figure a steeper angle, a field where they could not get in with a flat trajectory, then they change the powder charge; 500 yards reduce so much, 600 yards so much, etc.

Senator HITCHCOCK. Are there a good many prints of these made?

Major ROBINS. A great many; yes, sir. They have to be distributed to all the organizations using these guns and to all service schools who have to study, all the noncommissioned officers' schools, right on through the Army they have to have this information.

Senator HITCHCOCK. I think we had better go to luncheon now.

(Whereupon, at 1.30 o'clock p. m., a recess was taken until 2.30 o'clock p. m.)

AFTER RECESS.

The subcommittee met, pursuant to the taking of the recess, at 2.30 o'clock p. m., Senator James W. Wadsworth presiding.

ENGINEER DEPARTMENT.

STATEMENTS OF COL. F. C. BOGGS, ASSISTANT TO THE CHIEF OF ENGINEERS, IN CHARGE OF MILITARY DIVISION; MAJ. CLARENCE L. STURDEVANT; AND MAJ. THOMAS M. ROBINS—Resumed.

Senator WADSWORTH. How far had we gotten before the recess, Colonel?

Colonel Boggs. We had finished engineer operations in the field and were down to line 18 on page 60.

If I may, Mr. Chairman, I would like to make one or two statements with regard to several of the items we have passed over.

ENGINEER SCHOOL, CAMP HUMPHREYS.

In connection with the engineer school, General Beach wants me to invite the attention of the committee to a recommendation which was made by a House committee in regard to moving the engineer school to Camp Benning. The engineer school at the present time is at Camp Humphreys, which is the station not only of the school but of certain Engineer units. General Beach wished me to invite your attention to the fact that the movement of the school to Benning would be rather an expensive proposition. We have a large amount of technical equipment at Camp Humphreys in connection with the school there, and the movement of that equipment alone and setting it up at Benning would probably cost \$200,000 just for the equipment.

Senator SPENCER. It is pretty heavy material, is it?

Colonel Boggs. Yes; machinery and things of that kind.

Then in addition, of course, the improvements at Camp Benning for similar accommodations to those we have at Camp Humphreys for the school and for troops would probably run up to \$500,000.

Senator WADSWORTH. Buildings and barracks?

Colonel Boggs. Yes, sir; and water supply, etc.

Senator WADSWORTH. Is there anything else below that directs the moving of the school?

Colonel Boggs. No, sir; not in this bill. It is in another hearing that the committee is having in the House, and General Beach merely wished me to insert that statement here so that it will be available in connection with the Engineer school.

METHOD OF PRINTING MAPS.

As to the comment made by Senator Hitchcock in connection with the number of plates required at the map-production plant, I failed to bring out that each finished map must have several different plates, the number depending upon the number of colors there are on the finished map. For instance, on this map of Oahu there are about seven different colors. There must be seven different plates for the printing of that map. The first is for the black, and contains the general outline. The next is for blue, which overprints the black. The next is for orange, and so on. Therefore, for each finished map, if it is a colored map, we have to have as many plates as there are colors on the map. I simply wished to explain that.

CONTINGENCIES, ENGINEER DEPARTMENT, PHILIPPINE ISLANDS.

The next item in the bill is "Contingencies, engineer department, Philippine Islands."

We have no request to make in regard to that.

MILITARY SURVEYS AND MAPS.

The next item is "Military surveys and maps." We have no statement to make in regard to that. The amount appropriated in the House bill is the same as covered by the Budget estimates.

SEACOAST DEFENSES, UNITED STATES.

The next is seacoast defenses in the United States.

PREPARATION OF PLANS FOR FORTIFICATIONS AND OTHER WORKS OF DEFENSE.

Under that the first item is for preparation of plans for fortifications and other works of defense, in lines 10 and 11, on page 61. The House bill carries \$10,000. The Budget estimate was \$25,000. In other words, that is a reduction of \$15,000. A portion of the funds carried in our original estimate was for the employment of civilian assistants in the office of the Chief of Engineers under the office roll authorized. The work of planning for fortifications must go on, whether we are actually carrying out fortifications or not. For example, we are making plans for new types of fortifications: we are studying them right along. We are studying the subject of the use of railroad artillery. We are studying the land construction for our seacoast fortifications, and many things of that kind which must continue despite the fact that the actual work of construction is falling off rather materially; so that the reduction from

\$25,000 to \$10,000 will materially interfere with the carrying on of that work, and when we are ready to go ahead with more construction we will not be in a position to do so without these preliminary studies.

Senator HARRIS. You feel obliged to have the \$25,000?

Colonel BOGGS. Yes, sir. We would like to have that \$25,000. Now, that amount is not only for the office of the Chief of Engineers, but is also used for district officers throughout the country in connection with the local planning for fortifications also.

There is nothing further there. Shall I take up the next item?

Senator WADSWORTH. Yes.

CONSTRUCTION OF GUN AND MORTAR BATTERIES.

Colonel BOGGS. The next item is "For maintenance of gun and mortar batteries, \$100,000." I have no comments in regard to that.

Senator LENROOT. I would like to ask you about that. I see a notation that you had \$300,000 this year, and \$300,000 of an unexpended balance.

Colonel BOGGS. That was reappropriated this year, making a total of \$600,000 this year.

Senator WADSWORTH. Are you spending that this year?

Colonel BOGGS. Yes, sir; we will spend every bit of it.

Senator WADSWORTH. For the construction of gun and mortar batteries?

Colonel BOGGS. Yes; in the fortifications. That is for the construction of the batteries. That does not include the guns or carriages.

Senator LENROOT. That is in continental United States?

Colonel BOGGS. Yes; this is in continental United States.

Senator WADSWORTH. Where are you spending most of that money?

Colonel BOGGS. This year we are spending the money near New York.

Senator WADSWORTH. At Rockaway Beach?

Colonel BOGGS. Yes, sir; at Fort Tilden; and also at Fort Michie, in Long Island Sound; and also at Fort Storey, near Norfolk.

Senator HITCHCOCK. Are the guns ready for these batteries?

Colonel BOGGS. I think the guns are all ready for those I have enumerated; yes, sir. As a matter of fact, they are waiting for the completion of the batteries to be mounted.

Senator LENROOT. You expect to have completed some 16-inch guns this year. Will this include those?

Colonel BOGGS. This \$100,000 will complete the batteries at Fort Tilden, and we expect to complete this year with the appropriations Fort Michie on Long Island Sound and Fort Storey.

Senator LENROOT. You will complete with this sum all the batteries for the guns that will be furnished this fiscal year?

Major ROBINS. As I remember it, there will be four guns ready this year.

Senator HITCHCOCK. There are distinct appropriations, one for the gun, another for the carriage, and another for the battery?

Colonel BOGGS. No, sir; we have an appropriation for the ordnance, including the gun and carriage.

Senator HITCHCOCK. They are specified separately?

Colonel BOGGS. Yes; the gun and the carriage.

Senator HITCHCOCK. And, then, in addition to the gun and the carriage, you have this for the batteries?

Colonel BOGGS. Yes; this is for the concrete work, for the block to support the carriage, for the magazine, for the storing of the projectiles and powder, and for the power plant to operate the gun.

Senator SPENCER. Is that the usual language: "For construction of gun and mortar batteries"? That would indicate a battery of guns; it would not indicate simply the foundation.

Colonel BOGGS. That is probably due to the fact that the engineers have nothing to do with ordnance material. That is the language that has been used for years.

Senator SPENCER. It is the usual language?

Colonel BOGGS. Yes; it is the language that is usual.

Senator WADSWORTH. Proceed to the next item.

Colonel BOGGS. The next item is:

INSTALLATION AND REPLACEMENT OF ELECTRIC LIGHT AND POWER PLANTS AT SEACOAST FORTIFICATIONS.

For the installation and replacement of electric light and power plants at seacoast fortifications in the United States, and the purchase and installation of searchlights for seacoast defenses in the United States, \$270,000.

There is no comment to make on that.

Senator LENROOT. Why are you asking for the very large increase over the current year on that item? You have here for last year \$65,000, while this item is for \$270,000.

Major ROBINS. This bill is to take care of the power plants for the new batteries that are under construction. There are two new batteries in continental United States, 16-inch batteries, that have to be provided with complete power plants and electrical equipments. I might say that these 16-inch batteries, which are the first that are being built, require a great deal more power than the batteries that we have. They require something like 75 kilowatts per gun.

Senator LENROOT. How much?

Major ROBINS. Seventy-five kilowatts electrical energy per gun as against 25 kilowatts for the guns that we have had heretofore.

Senator LENROOT. I suppose none of you know what the total cost of the 16-inch gun is, with the battery and all?

Senator HITCHCOCK. It is \$600,000 for the gun and carriage, as I recall it.

Colonel BOGGS. I can give you the figure on the engineer section, \$300,000.

Senator HITCHCOCK. What would be the total of that?

Senator SPENCER. That, added to the gun and carriage, would make the total about \$900,000.

Senator LENROOT. About \$1,000,000?

Senator WADSWORTH. Is that \$900,000 per gun?

Major ROBINS. That is complete, with all the power and accessories.

Colonel BOGGS. No; the \$300,000 for the engineer department is for two 16-inch rifles, when they are close together, when they are served from the same magazine.

Senator WADSWORTH. That would be \$150,000 each?

Colonel Boggs. Yes, sir. That does not include the power. That includes the concrete for the gun block, the magazine, the plotting room, the power-plant house itself, and the road or railroad which must be used in getting the ammunition to the gun; the power-plant machinery and electrical equipment comes under this other item.

Senator WADSWORTH. How much would it be?

Colonel Boggs. Approximately \$60,000 per gun. It depends upon the location of the power plant as regards the gun itself and the amount of power which is required; but in round numbers it is \$60,000 per gun for 16-inch guns.

Senator WADSWORTH. In other words, \$150,000 for the concrete construction, \$50,000 for the power and machinery, and \$550,000 for the gun and carriage?

Colonel Boggs. Yes; and then if you wish to go into the other details you have searchlights and fire control. That is so dependent on the location that I do not believe I could give a figure for that. It might run up to \$40,000 or \$50,000 in certain locations.

Senator WADSWORTH. Yes. It will crowd \$900,000 per gun?

Colonel Boggs. Yes, sir.

Senator WADSWORTH. It is a very grave question, whether or not we could not find some cheaper form of defense.

Colonel Boggs. There are others that have been suggested.

Senator WADSWORTH. It is a tremendous investment.

Senator HITCHCOCK. Is this searchlight used for picking up ships that are supposed to be in range of guns?

Colonel Boggs. Yes; for picking up ships in range of guns and also for anti-aircraft defense.

Senator HITCHCOCK. Every one of these big guns must have its searchlight?

Colonel Boggs. It must have possibly more than one, because a searchlight will search only in one sector, and you may have to have others, although, on the other hand, one searchlight may partially serve two or three guns.

Senator HITCHCOCK. And you have not counted in the anti-aircraft defense?

Colonel Boggs. No, sir; I have not counted the anti-aircraft defense nor the ammunition, or the housing of the troops, and so on.

Senator WADSWORTH. We will call it a round million dollars.

Senator SPENCER. It costs about \$3,000 a shot to fire those guns.

Colonel Boggs. I forget what the figure is on the 16-inch. Can you remember that?

Major ROBINS. No; I do not think I could testify on that. That is an ordnance matter, essentially.

CONSTRUCTION OF SEAWALLS AND EMBANKMENTS.

Senator WADSWORTH. What is your next item?

Colonel Boggs. The next is construction of seawalls and embankments, \$8,000.

There is no comment to be made on that.

The next item is:

PROTECTION, PRESERVATION, AND REPAIR OF FORTIFICATIONS.

For protection, preservation, and repair of fortifications for which there may be no special appropriation available, and of structures for the submarine mine defense of the United States, and for maintaining channels for access to submarine mine wharves, \$250,000.

The Budget carried \$300,000 for preservation and repair of fortifications. The original estimate on which that was based, was divided into two parts: For nonstructural protection, preservation, and repairs, \$108,000; and for structural repair and preservation, \$192,000—making the total of \$300,000.

The nonstructural preservation and repairs is the technical term we use merely for ordinary repairs around a fortification—repairing the breaking of a light, or repairing the breaking of a window, and so on. That is based on estimates which are submitted by the local engineer in consultation with the local Artillery officer, and it was based on an original estimate of \$400,000 for both the nonstructural and the structural, for which the Budget carries \$300,000; consequently, if the amount is cut down to \$250,000 as is intended in the House bill, it merely means that the structures will go without repairs, and naturally, at some future time, if they are ever put in repair, it will require more funds to do so.

Senator HITCHCOCK. At how many points is it proposed to spend this money?

Colonel BOGGS. I imagine it must cover at least 50 points, if not more.

Senator HITCHCOCK. Suppose that was all omitted, what would happen?

Colonel BOGGS. Some of the batteries would be in such condition of nonrepair that they might not be able to use them; others would be in such condition that to put them back in condition, at a later date, would require a very excessive amount. That is, if you repair these as the repairs become needed, it can be done at rather a small cost.

Senator HITCHCOCK. You used \$300,000 in the current year?

Colonel BOGGS. Yes, sir.

Senator HITCHCOCK. Will you use another \$300,000 during the next year?

Colonel BOGGS. Yes. We never are up on our repair.

Senator LENROOT. Are any ordinary repairs performed by the enlisted personnel?

Colonel BOGGS. Yes; I think there are. The Artillery, I believe, does some little repair work, but we have to furnish, out of these appropriations, material to be used, and then of course some of the repairs are too technical for the enlisted men to perform. They require special workmen.

I might say that this appropriation runs back for several years. In 1914 it was \$220,000, in 1915 it was a small item, in 1916 it was \$200,000, in 1917 it was \$250,000, in 1918 it was \$250,000, in 1919 it was \$250,000, in 1920 it was \$250,000, in 1921 it was \$300,000, and in 1922 \$300,000.

Senator HITCHCOCK. The pre-war amount was something under \$250,000?

Colonel BOGGS. It was about \$200,000 in 1915. It was \$220,000 in 1914. It was \$320,000 in 1912. It goes back to 1889. In 1913 it was \$195,000, in 1912 it was \$320,000, in 1911 it was \$320,000, in 1910 it was \$245,000, in 1909 it was \$240,000, and so on. But, of course, since the war, there have been additional batteries turned over to the Artillery which now come under this head.

Senator HITCHCOCK. Roughly speaking, the repair bills are here in continental United States?

Colonel BOGGS. Yes.

Senator HITCHCOCK. What is it that gets so out of repair?

Colonel BOGGS. For example, not long ago there was a heavy cyclone down in Florida, which blew off some of the important structures, the plotting room, and so on, demolished that, and that had to be repaired right away in order to put the battery in position for even ordinary training; and there are many things of that kind. The sand blows in. Then there is the painting of the steelwork, which is quite an important item.

Senator HITCHCOCK. They have to do that? You have enlisted men that are taken out of all walks of life—masons and painters and carpenters—and do you never employ any of them on this work?

Colonel BOGGS. There are very few of those men who are enlisting in the Army; and if you put those men at this work continuously they would receive no training in the regular duties of the Army, and it would probably be cheaper to employ the men necessary outside. But then you would have no army, if you used those men essentially for this work; you are depriving the man and his unit of the training which it is necessary that he must have if there is to be an army.

Some of that work is done. For example, the cleaning may be done, and throwing sand out of the emplacements, and that probably is, I imagine, in all cases done by the troops. But when you come to painting, I imagine the troops painting some of the ironwork would waste more paint than you would save by the use of the troops instead of skilled labor.

Senator WADSWORTH. I have seen them painting ammunition at Fortress Monroe, and it did not occur to me at the time that that required a skilled painter.

Colonel BOGGS. I am not speaking of ammunition, but of the painting of the work around the batteries, the special steelwork.

Senator LENROOT. Do you mean that they do not have that kind of work?

Colonel BOGGS. They do in many cases, but in all cases we have to furnish the material for that.

Senator WADSWORTH. Yes, always; but the material would be only about one-third of the cost, or one-quarter.

Colonel BOGGS. I believe that most of the rough painting and things of that kind are done by the Army personnel—where there is any personnel.

Senator HITCHCOCK. If the personnel was cut down it would have to be more?

Colonel BOGGS. Yes; in many of these places there is nothing but a caretaker, you know.

Senator WADSWORTH. Of course, it is to be taken into account now that a large proportion of our seacoast defenses are not fully manned.

Colonel BOGGS. Yes; and there are many of them where there is merely a caretaking detachment which is used solely for the care of the guns, and all the time of those men is spent keeping the guns in order. They have no time to spend on this work. Where there is a garrison the troops do do the ordinary labor. As to painting, that

was rather a bad illustration; but take, for instance, electrical work: there are very few of the enlisted men who can do electrical repair work.

Senator LENROOT. Have you any knowledge as to how many of these fortifications so equipped with big guns would be of no value as a matter of defense? Are there many of those?

Colonel BOGGS. I do not think any of the money we are spending here would be considered of no use.

Senator LENROOT. In this item you are keeping all these places up, even if you have nothing but a caretaker there. Have we not a good many of that kind, where our guns would be of practically no value as a defense?

Colonel BOGGS. I do not believe so, Senator. I think they are keeping up only those which they consider under present conditions as essential. If they had some of the new armament, some of those older guns might go out of commission; but where they have not the new armament, they feel that such armament as they have is better than nothing, and they are keeping that in shape.

SALARIES AND WAGES.

Senator SPENCER. How much of this appropriation goes out for salaries?

Colonel BOGGS. Out of this \$300,000 for protection, preservation and repair we estimate that salaries and wages will be \$190,000, material and equipment—

Senator SPENCER. Have you the salaries and wages separated for different places?

Colonel BOGGS. No, sir; I have not. That would be an extremely hard thing to get, without going to the local office.

Senator HITCHCOCK. Salaries and wages are how much?

Colonel BOGGS. Salaries are \$70,000, and wages are \$129,330.

Senator HITCHCOCK. Salaries are how much?

Colonel BOGGS. Salaries are \$70,000, and wages are \$129,330.

Senator HITCHCOCK. Does that mean a large number of civilian employees, or are they just brought—

Colonel BOGGS. No; the salaries are for what we might call our permanent employees.

Senator HITCHCOCK. But they are civilians?

Colonel BOGGS. Yes. The wages are for the men as they are needed. As certain work is taken up, they are employed to do the work, and as it drops down the number of men is decreased.

Senator WADSWORTH. I think myself, Colonel, that this whole thing is, as Senator Lenroot suggested, a matter for very serious revision.

Colonel BOGGS. Do you mean in connection with a general revision of the defense proposition?

Senator WADSWORTH. Yes; I do.

Colonel BOGGS. Well, that is a question that higher authority than I would have to decide. In the meantime, however, if this property is not preserved, the small defense that we have will be decreased, and any changes in the method of defense would probably take quite a number of years before it was put in such a position that it would take the place of these defenses that we have.

Personally, I do not believe the heavy gun will be put out of existence by the bombing plane. There seems to be an impression that the heavy gun will be withdrawn from the front line, as we have it

now, and protected by putting it in a secluded position, concealed either by camouflage or by putting it where it can not be readily discovered. But there is a very grave doubt, of course, as to how the air battle might result, and if the enemy's airplanes were able to overcome ours, then, if you had not a second line of defense with these guns, your coast line would be entirely open to attack.

Senator HITCHCOCK. At how many points on our Atlantic coast, for instance, have we these defenses?

LOCATION OF DEFENSES.

Colonel BOGGS. We have them at Portland, Me., at Portsmouth, Boston, New York Harbor, Narragansett Bay; and coming on down, at Delaware Bay, Chesapeake Bay—just mentioning the larger points—Wilmington, Charleston, Savannah, Key West, Tampa, Pensacola, Mobile, New Orleans, Galveston, San Diego, etc.

Senator HITCHCOCK. A good many of those have very small guns?

Colonel BOGGS. Some of them are small guns, and some of them are larger.

Senator HITCHCOCK. Is anything being expended here for keeping up those fortifications?

Colonel BOGGS. Yes; the small guns are essential for keeping off boats' attacks. We are keeping these in many places because we have nothing better. If we had something better, some of those guns might be eliminated. For example, some of these guns will be eliminated when this railroad artillery comes to be available; but we have not that available at the present time.

Senator HITCHCOCK. Is it not a waste of good money to be repairing and keeping up these defenses that are practically obsolete?

Colonel BOGGS. I think not, Senator, if we are carrying out our defense scheme, because presumably the defense scheme is supposed to meet emergencies that we can not foresee.

Senator HITCHCOCK. A fleet that could cross the ocean would make mincemeat of those defenses.

Colonel BOGGS. They are for protection against landings, and also they are protection as a last resort.

Senator HITCHCOCK. A small gun is no protection against large guns at all, is it?

Colonel BOGGS. No; but it protects against landing parties.

Senator WADSWORTH. It is a rather interesting lesson to learn that the combined English and French fleets could not make any impression on the Turkish fortifications.

Senator HITCHCOCK. But those were tremendous fortifications.

Senator WADSWORTH. No; they were very secondary. They were, generally speaking, very small guns, as it is suggested.

Colonel BOGGS. Major Robins says those were even 8 or 9 inch guns. At the present time we are not spending anything on any less than a 12 to a 16 inch gun. We are spending very little on the 12-inch.

Senator HITCHCOCK. As I remember, we have a lot of small guns on the coast here.

Colonel BOGGS. I think those are mobile guns.

Senator HITCHCOCK. No; I do not mean that.

Colonel BOGGS. Do you mean we have them here?

Senator HITCHCOCK. Yes. Is there any money being spent on these fortifications?

Colonel BOGGS. The idea is that it is desirable to keep those we have until we get something better. If we had mobile artillery and in sufficient quantities to protect those places, then those would go out of existence.

Senator LENROOT. Right in this connection, you spoke of the bombing plane not taking the place of a big gun. But so far as these small guns is concerned is it not true that if we had control of the air those guns would be absolutely useless as a defense? If we do not control the air, they would be destroyed by the enemy aircraft?

Colonel BOGGS. Partly so, Senator, but there is a conceivable condition where they might be of very great value in the interim.

Senator LENROOT. Take the present development of the airplane.

Colonel BOGGS. I think the general consensus of opinion is, as I stated before, that the development of the airplane means that our heavy guns will be drawn back.

Senator LENROOT. Yes; because they will almost certainly be destroyed if these batteries are located?

Colonel BOGGS. Yes; and small guns at the present time are used for protecting our mine fields from countermining, and also to protect against landing parties. Now, as we develop our mobile artillery for that purpose these guns will gradually go out of existence; will not be kept up any more; but until we have them it would seem to be an unwise policy to put away what we have when we have nothing to replace it.

Senator LENROOT. That all goes to the question whether there is value enough in the development of the airplane to warrant the belief that it can——

Colonel BOGGS. There is also a question whether the development of the airplane has gone sufficiently far to make it absolutely sure that it is going to be the only weapon of the future. At the present time——

Senator WADSWORTH. The seacoast defense's principal function is. is it not, to protect the mine fields?

Colonel BOGGS. Of the small guns; yes, sir. And another for the longer guns is to protect the harbor, to protect the Navy, to protect special points like naval bases, and so on, so as to release the Navy for active operations outside. For example, if you had a harbor well protected your Navy, if overpowered by the opposing navy, could run into that harbor under the protection of those guns, and it would be safe until the enemy left. In case of refitting, the ship can run in under those guns.

Senator WADSWORTH. Has it not been demonstrated in recent wars, now that the principal protection of the harbor is the mine, and that the seacoast guns, or guns on the shore, find their principal use in keeping the enemy's destroyers and small craft from coming in and taking up the mines in the mine fields?

Colonel BOGGS. Yes, as it is at present; although of course the mines are largely going out of use. It is my understanding that they are not developing the mine field much further.

Senator WADSWORTH. Has not experience in the late war proved the usefulness of mines?

Colonel BOGGS. Those were floating mines. I thought you meant the permanent mine field.

Senator WADSWORTH. No; they were anchored mines.

Colonel BOGGS. They were anchored mines, but not what we would call a mine field. I thought, Senator, for instance, that you

were speaking of a mine field being protected by a land gun, which generally was within the limit of the range of that gun. These anchored mines were distributed all over the outside ocean. As a matter of fact, they formed belts during the war, and they were under the protection of no guns.

Senator WADSWORTH. Floating mines?

Colonel Boggs. Yes.

Senator WADSWORTH. When you put mines in the mouth of New York Harbor you have that absolutely blocked unless the enemy can sweep those mines away?

Colonel Boggs. Yes; and the smaller guns were constructed for the protection of those mine fields. The larger guns, of course, were to keep the larger vessels off.

Senator WADSWORTH. It is rather interesting, as I recollect reading the history of some of these things, how very seldom it is that a battleship is injured by the shots from a heavy land gun. Likewise it is interesting to note how seldom it is that there is a land fortification that is injured by the heavy shots from battleships.

Colonel Boggs. Yes. One reason for the first fact is that the battleship very seldom comes within range of a land battery. If you have a land battery you can feel pretty sure that the battleship is going to stay at a considerable distance; so that by merely having the guns there, you protect what the gun is designed to protect; you protect it almost as much by the psychological effect as by the shots of the gun at the enemy.

Senator WADSWORTH. As I recall, the principal naval losses were from mines.

Colonel Boggs. Yes; and as you also brought out, those mines near the shore were also protected by the smaller type of guns.

Senator WADSWORTH. Yes; but little damage was done.

Colonel Boggs. If they had registered hits on the larger vessels, they would not have done much damage. But you take a 16-inch shell, and there are very few ships that would stand the shock from that shell. In the actual naval conflicts many vessels were sunk by gunfire during the late war.

MAINTENANCE AND REPAIR OF SEARCHLIGHTS AND ELECTRIC LIGHT AND POWER EQUIPMENT.

Senator WADSWORTH. Yes. Take the next item [reading]:

For maintenance and repair of searchlights and electric light and power equipment for sea-coast fortifications, and for tools, electrical and other supplies, and appliances to be used in their operation, including the purchase of reserve lights, \$110,000.

You asked for \$160,000, and the House gave you \$110,000?

Colonel Boggs. Yes; they gave us \$110,000. That \$50,000 that we did not get means that we will not be able to furnish a sufficient number of mobile searchlights for the use of the antiaircraft organizations in the Regular Army.

General Coe advises that he will need 48 of those for the Regular Army alone, and we have no reserve. He also states that he is getting calls from the National Guard for that particular type of light. We have on hand 41, and this \$50,000 was to be used for four or five additional lights, depending on what we could get them for at the

time. They are a mobile light that are used with the antiaircraft gun in searching out a plane and holding the plane under the light while the gun can be used.

Senator WADSWORTH. Have you issued those 41?

Colonel BOGGS. We have issued 29, and they are in the hands of troops. The others we have and they will be called for by the Coast Artillery within a short time.

Senator HITCHCOCK. What does each of those lights cost?

Colonel BOGGS. It costs from \$12,000 to \$15,000; but not having bought any very recently, we can not give you the exact figure. It is hoped that the prices are going down.

Senator HITCHCOCK. Suppose you do not get them?

Colonel BOGGS. It merely means that they will not be able to equip their antiaircraft guns with those lights, which in turn means that those organizations will be unable to drill properly. Everything of this kind merely means that the equipment of the Army is not complete. We will not have a complete Army because the Army consists not only of the men but of the material, and the combination of the men trained to use the material.

Senator HITCHCOCK. That is, they could not drill at night?

Colonel BOGGS. No, sir; they could not drill at night, which is probably the time when the airplane will be largely used.

Senator HARRIS. How much are you compelled to have on that item?

Colonel BOGGS. We cut that down to what we thought was the minimum to provide a reasonable supply of these lights this year; and in this condition we do not contemplate furnishing the total amount.

Senator HITCHCOCK. Do they drill every night?

Colonel BOGGS. I do not believe they do every night; but they drill frequently. Probably during the summer they may drill many nights in succession.

Senator HITCHCOCK. I find that all through here they provide supplies for constant operation, and yet we all know that the actual drill is a comparatively occasional affair.

Colonel BOGGS. I might say in that connection that at the present time they have taken for these batteries certain lights which were used at the seacoast fortifications, so that we are to a certain extent shy of those lights at the seacoast fortifications. Also, if I might interject this, the supplies we are asking for are based on normal drills, not drilling all the time but cutting down the drills to the very minimum.

Senator HITCHCOCK. Then while they were doing something else the rest of the time the searchlights would be idle?

Colonel BOGGS. Yes; but it takes some time to manufacture one of these lights, and they could not transport one of them from one place to another without considerable expense.

Senator WADSWORTH. Will you take up the item of "Insular possessions" now? Have you anything to say about the Philippine Islands? That is in line 10, page 62. You asked for \$4,000, and they gave you \$3,000.

Colonel BOGGS. No, sir; nothing to say.

Senator WADSWORTH. Is there anything special in any of these items?

LAND DEFENSES, HAWAIIAN ISLANDS.

Colonel Boggs. The special item that I wish to invite attention to is the one of "Land defenses, Hawaiian Islands, \$210,500." That is committed in the House bill.

The Budget estimate was \$210,500, and that was entirely eliminated. That figure was to continue the road program in the Hawaiian Islands, on the island of Oahu. I have here a map of the island, and I have also a relief map. Scofield Barracks is at this point, and that is the point where the main garrison of Oahu will be concentrated [indicating on map].

Senator HITCHCOCK. How far inland is that?

Colonel Boggs. This scale is a mile to the inch, and that makes it about 8 miles from the seashore.

Senator HITCHCOCK. Eight miles from the seashore?

Colonel Boggs. Eight miles from this particular point; yes, sir [indicating on map]. It is about 10 miles from [indicating on map]. With the concentration of troops at this point it is designed that in case of attack, particularly landing attack, the troops will be sent out to the point in question, and will be able by a system of defenses to protect from any serious landing. In order to get the troops and the guns there, we must have roads. At the present time there is no road from Scofield Barracks to the west over these very heavy intervening mountains. That is shown here on this relief map. Here is Scofield Barracks and here is this open beach which is subject to the attack of landing parties on the west coast of the island. There is no way of transporting troops or guns except by going way around, and the roads are very poor in here to that beach.

With the sum that we are asking for we hope to be able to construct this road indicated on the map from the point here over this ridge to the foot of the mountains on the west side, so as to protect the beach from landing.

Senator HITCHCOCK. That is where you would be then [pointing].

Senator LENROOT. Where will you get to after the expenditure of this sum, so far as giving you any protection is concerned?

Colonel Boggs. We would be over on the west side of that range.

Senator LENROOT. But you still would not be able to send troops all the way to the coast.

Colonel Boggs. No; but when you get down here you are in better position to struggle across to the coast. You could not struggle across that range under any circumstances without this road.

Senator HITCHCOCK. Is this a very rugged country?

Colonel Boggs. Yes; that ridge is very sharp.

Senator HITCHCOCK. How could you get along this way [indicating on map]?

Colonel Boggs. If you could get your troops and guns over the range to the west, you could get them down here [indicating].

Senator HITCHCOCK. These guns, if you got them on top here, could protect there [indicating].

Colonel Boggs. They could protect here, but they could not hold boats off and prevent a landing.

Senator HARRIS. The idea is that if you have the road a smaller number of troops will protect the whole island, because they can be moved to any point?

Colonel Boggs. Yes; if it were protected properly, otherwise you would have to put troops all around the island.

Senator HITCHCOCK. Is this another road here [indicating]?

Colonel Boggs. No; in the north this whole beach is subject to landing.

Senator HITCHCOCK. How far is that there?

Colonel Boggs. At the extreme point it is 10 miles from the barracks; at this point here [indicating].

Senator LENROOT. The total road project involves \$5,000,000?

Colonel Boggs. The total road project involves about \$5,000,000, of which these roads we are asking for now are considered as deserving priority. There is this road over the ridge—a survey of this [pointing] road only—and a partial completion of this road here [pointing], which is completed, I believe to about this point [indicating], and we hope to complete that road down here to Pearl Harbor.

Senator HITCHCOCK. The barracks are established?

Colonel Boggs. Yes; the barracks are established.

Senator HITCHCOCK. How are they reached?

Colonel Boggs. They are reached by road to Honolulu. It is not a good road and is getting in very bad shape.

Senator HITCHCOCK. It is not a railroad; it is a wagon road?

Colonel Boggs. A wagon road in rather bad shape, and they also have a narrow-gauge railroad there.

Senator JONES of Washington. Supposing a landing were made on at beach, what good would it do them?

Colonel Boggs. It would give them a foothold on land.

Senator JONES of Washington. But if they had no road to get upon top there and our people had guns up there to bombard them with, how could they maintain themselves there for long on that beach?

Colonel Boggs. It would give them a place where they could make a start from to attack some other landing place, in the first place.

Senator JONES of Washington. If they had no railroad and no docks or anything down there, what could they do?

Colonel Boggs. They could land some guns, and if we had nothing here [indicating]—

Senator JONES of Washington (interposing). But I am assuming that we would have something there.

Colonel Boggs. Oh, you are assuming that we have guns up here [indicating]?

Senator JONES of Washington. Yes.

Colonel Boggs. They could attack them. If this place were attacked, it would be attacked by a number of troops far in excess of ours.

Senator JONES of Washington. Would not that road, if we built it there, help them to get up?

Colonel Boggs. We would hope that if they did take this portion of the beach we would put the road in such shape that they would

not be able to use it. We would destroy the road as we went back up the mountain. The road would enable us to keep them from getting up.

Senator JONES of Washington. How, if they had a superior force?

Colonel Boggs. You could keep them from landing with a much inferior force, but after it was once landed their superior force would immediately make itself felt. If you could beat them off in detail, you could prevent them from landing.

Senator JONES of Washington. If there were no docks there—I assume there are none—or no railroad, or anything of that kind, and you had big, strong guns up there, how could they land there?

Colonel Boggs. For example, they might be able to land at night.

Senator JONES of Washington. Would you not be waiting for them and have your searchlights, and that sort of thing?

Colonel Boggs. We might not be able to see where they were landing. It would be very difficult to find them at night.

Senator JONES of Washington. If you knew there was a force likely to land there, would you not be likely to have telephone communication there?

Colonel Boggs. Yes; but at the same time they were attempting a landing there they might be threatening a landing over here also, and if you had all your guns there and no guns over here—

Senator JONES of Washington. I do not suppose you would have all your guns here [indicating].

Colonel Boggs. The number of troops on this island, compared with the force that would be attacking the island, is rather small.

Senator JONES of Washington. There is one thing to be said about the proposition, and that is if you can make it safe by roads, you can do it much cheaper than by fortifications.

Colonel Boggs. Yes; and if you put batteries up there, they would not stay there.

Senator JONES of Washington. You want to build these roads so as to move your guns and troops around?

Colonel Boggs. Yes, sir.

Senator JONES of Washington. Oh, I did not understand that.

Colonel Boggs. Yes; that is the object of the roads.

Senator HITCHCOCK. Can you take them up there to the mountain top, to the divide?

Colonel Boggs. Oh, yes.

Senator HITCHCOCK. The landing points would be commanded by guns if you took your batteries up there?

Colonel Boggs. Not commanded very well. You can, to a certain extent, command these beaches, but that would be by indirect fire, and the number of shots wasted would be very much less if you were to go down the mountain and get direct fire.

Senator HITCHCOCK. If you had guns up on top there, how would it be?

Colonel Boggs. My recollection of the configuration along the top of that ridge is that you can not get a gun anywhere near there for direct fire, and the idea is to get the guns off of that ridge so that they could be deployed as they might be needed, with a good road finally to the coast so that they could be used along the coast.

Senator WADSWORTH. Have any plans been made for the use of railway artillery in Oahu?

Colonel BOGGS. Major Robins can tell you.

Major ROBINS. Yes; we have railway artillery there now.

Senator HITCHCOCK. I think we have about 14,000 men there now!

Major ROBINS. I could not tell you about that. The railroad they have is a 3-foot gauge all over the island, and in case of trouble that track would have to be fixed up considerably in order to take these guns.

Colonel BOGGS. Moreover, that track runs right along the seacoast and is subject to bombardment by a naval force.

Senator WADSWORTH. Have you anything further to say about the insular possessions?

Colonel BOGGS. No, sir; that is the only thing in connection with that.

Senator HITCHCOCK. This unexpended balance, how much have you there?

Colonel BOGGS. That will all be used this year.

Senator HITCHCOCK. I was wondering how much it was. You said you had \$100,000 and an unexpended balance of 1921.

Major ROBINS. It is \$144,700, all together.

SEACOAST BATTERIES.

Senator WADSWORTH. Now, I want to ask your opinion, Colonel. You may give it, of course, as your personal opinion: Which is the more important in the defense of the whole island, that item of \$210,000 for the continuing of the road or the item of \$215,000 for the construction of additional batteries of artillery?

Colonel BOGGS. What was the item for seacoast batteries?

Senator WADSWORTH. \$215,000. If you could only have one, which would you take?

Colonel BOGGS. I believe I would take the seacoast batteries that are under construction at the present time. To stop work on that would mean considerable delay. In an emergency you could probably put in some kind of a road there, but you could not construct the seacoast battery.

Senator HITCHCOCK. The question is, what the seacoast battery is going to cost eventually?

Colonel BOGGS. Those are two 16-inch batteries.

Senator WADSWORTH. Of two guns each?

Colonel BOGGS. No; one gun each. There are two.

Senator WADSWORTH. That covers Honolulu?

Colonel BOGGS. That covers Pearl Harbor; yes, sir. They are to be located out toward that point [indicating on map].

Senator HITCHCOCK. They are pretty nearly finished?

Colonel BOGGS. No, sir; they are just being constructed.

Senator LENROOT. This appropriation will complete them?

Colonel BOGGS. We expect it will complete them.

Senator HITCHCOCK. I say this will finish them?

Colonel BOGGS. Yes, sir.

Senator WADSWORTH. Is that next \$210,000 item expected to be expended in connection with the completion of those two 16-inch guns?

Colonel BOGGS. Yes, sir.

Senator WADSWORTH. Is there anything in the seacoast defenses of the United States that you could better get rid of than that road on Oahu?

Colonel Boggs. The only battery construction that we have in the United States is the \$100,000 for the completion of Fort Tilden, and to stop that, I think, would be extremely inadvisable. The rest of it is under the head of "Preservation, repairs and supplies." Decreasing supplies, you merely put batteries out of use for training purposes. If you decrease preservation and repairs, you likewise practically put your batteries in a condition where the future expense will be very heavy, and in some cases to put a battery in such shape that it can not be used.

Senator WADSWORTH. I know; but there is \$270,000 for electric lighting and power plants and appliances. They give them \$100,000 for the batteries themselves.

Colonel Boggs. Yes, sir.

Senator WADSWORTH. I do not mind saying that I am tremendously impressed with Hawaii as a place which could be made of the greatest possible use. I do not say that it could be made perfect, but much can be done by constructing means of communication back and forth.

Colonel Boggs. Yes; means of communication are essential. I might enlarge more in regard to the need for this road. For instance, you have a system of defense of troops with smaller guns to keep off landing parties. Those troops must be supplied, and it is almost impossible to supply them by the line along the coast, because they would be in danger from the fire of vessels at sea; but you could supply them there probably at night; not subject to enemy's fire. That road could be camouflaged and could supply those troops down there [indicating]—a small advance guard to keep off landing parties—and for that you need this road that comes up near this end [indicating]. You can not supply troops without roads.

Senator HITCHCOCK. What would prevent them from landing now on the north side?

Colonel Boggs. Nothing at all, except there is a road running along here [indicating] and that along there. That is rather a poor road, and it runs in front of the successive defensive lines which would be constructed in case the enemy did land. It might be said if an enemy once landed that would end it, but we would undoubtedly fight a defensive fight until our Navy was in position to come over and drive the enemy away, and every day of a defensive fight may add to the time necessary for the Navy to come. Part of the Navy might be on the Atlantic coast of the United States at the time of an attack on Honolulu, and it might require several weeks or more to get the Navy across into the Pacific and over there, and in the meantime the island would have to take care of itself.

Senator HITCHCOCK. There is no landing danger there [indicating].

Colonel Boggs. Not as much. They have all the weather conditions against their landing there; they are not as good. In the system of roads it is finally contemplated to do some road work over there.

SEACOAST DEFENSES, PANAMA CANAL.

Senator WADSWORTH. The next heading is on page 63, seacoast defenses, Panama Canal.

Colonel Boggs. The first item on which I want to make any comment is that commencing in line 12, on page 63, which reads as follows:

PROTECTION, PRESERVATION, AND REPAIR OF FORTIFICATIONS.

For protection, preservation, and repair of fortifications of the Panama Canal for which there may be no special appropriation available, including structures erected for submarine mine defense, and for maintaining channels for access to submarine mine wharves, \$40,000.

The estimate on that was \$50,000, and the House reduced it to \$40,000. I note that the year before we had only \$25,000. The condition down there is that their batteries are beginning to get in rather bad shape. The tropical country is pretty hard on some of the construction, and those batteries ought to be kept up in shape.

It is the same thing in regard to supplies for seacoast defense [reading]:

MAINTENANCE AND REPAIR OF SEARCHLIGHTS AND ELECTRIC LIGHT AND POWER EQUIPMENT.

For maintenance and repair of searchlights and electric light and power equipment for fortifications and for tools, electrical and other supplies, and appliances to be used in their operation, \$30,000.

That was cut from \$45,500 to \$30,000. For the current year it is \$30,000, but more batteries have been turned over to the use of the artillery, which means that there are that many more batteries to supply under this appropriation.

Senator HITCHCOCK. What explanation is there for these tremendous maintenance and supply charges all the time?

Colonel Boggs. For example, the electrical equipment must be kept up. That deteriorates very rapidly in a tropical climate.

Senator HITCHCOCK. What is it that deteriorates—motors?

Colonel Boggs. Motors deteriorate, and insulation deteriorates, and there is a general deterioration of that kind, as any machine will deteriorate. I might say also that the supplies include the fuel oil and the lubricating oil for operating these machines.

Senator HITCHCOCK. Is it the dampness of the climate that makes this deterioration?

Colonel Boggs. That has a large effect on it; yes, sir.

Senator HITCHCOCK. We have motors running here year after year in industrial establishments.

Colonel Boggs. Yes; you have repairs on those all the time.

Senator HITCHCOCK. I hardly think we have any such tremendous bills as these.

Colonel Boggs. This preservation and repair of electrical equipment is about 7 per cent of the value of the equipment.

Senator WADSWORTH. Annually?

Colonel Boggs. Yes, sir. That is in this appropriation.

Senator HITCHCOCK. This is \$45,000? You mean the value of that is something like \$600,000 to \$700,000?

Colonel Boggs. For the value of the electrical equipment the repair of which comes out of that appropriation. Under the head of supplies for seacoast defenses, ordinary supplies are \$30,000. For fuel, oil, and lubricants, in round numbers, it is \$10,000, and for contingencies and odds and ends, \$5,000.

The \$30,000 under ordinary supplies—the most of it is to be used—practically all of it is to be used for the procurement of supplies, parts, etc., for electrical generating equipment and other equipment of the value of \$481,000. Thirty thousand dollars will be used for the repair parts and the operation of the searchlights, and electrical generating equipment. I think if you will take the repairs on an automobile, for example, which is a pretty good machine, they will run up higher than that.

Senator HITCHCOCK. An automobile is exposed to the weather; but this is something that is in a house and is protected.

Colonel Boggs. Yes.

Senator HITCHCOCK. And is supposed to be well equipped; an automobile is on the roads.

Take, for instance, a newspaper plant; there are motors in that plant that run constantly, and if we had to spend any such amount of money as this it would be quite an item. People all over the country have motors, and there are dynamos here—

Colonel Boggs (interposing). There are all kinds of searchlights and machinery here, and the insulation deteriorates rapidly. Some of the wires for these searchlights run on top of the ground.

Senator WADSWORTH. Is that all under the head of seacoast defenses, Panama Canal?

Colonel Boggs. There is one more item.

MAINTENANCE AND CLEARING OF TRAILS.

For maintenance and clearing of trails, \$20,000.

That estimate was for \$34,000, for the clearing and maintenance of those trails in Panama, and the House bill carries only \$20,000. The clearing of trails in a tropical country like Panama is rather a serious matter. There was no appropriation last year and those trails have grown up rather decidedly. They have to be cleared in order to allow the troops to get to the different battery locations, to the different antiaircraft guns, and so on.

Senator WADSWORTH. Can not the troops themselves look out for that?

Colonel Boggs. I do not know how much they do use them. There is some material, of course, to be paid for out of this. But to use white troops in a country of that kind for clearing trails means that the troops would not be available for very much else during that particular period. It is a pretty hard strain on white troops to go out and clear trails.

Senator LENROOT. It only takes \$34,000. It would not take very much time for the troops to attend to that.

Colonel Boggs. There are a very limited number of troops for the protection of Panama itself and, as I say, every time that you use troops for that work you take that much more from their training and you render them just of that much less value.

Senator LENROOT. Is not that the sort of work the troops would engage in if they were engaged in a campaign, and do they not have to be trained in that?

Colonel BOGGS. There is not very much training in clearing trails. The natives simply take the bolos and clear the trails without very much trouble. But our engineer troops at the present time, for example, you might say are of very little value for actual campaigning, because they have not had any engineer training for some time. They have been so much used in keeping up repairs and utilities that they are not in a real sense engineer troops. And if you put the troops in Panama at anything of that kind it will have a very bad influence. There are many other things that should be done. For instance, the mapping of Panama is proceeding, but very slowly. At the present rate it will take 100 years to finish it.

Senator WADSWORTH. I think we have 9,000 troops in Panama, and it would seem that out of those 9,000 troops in the course of a year we might get \$24,000 worth of trail clearing.

Colonel BOGGS. Well, that is just the way that the use of troops for that purpose is against the proper use of them in their training, and so on.

Senator WADSWORTH. It is obviously a small matter.

Colonel BOGGS. It may be a small matter, but it covers a good deal of space. The cost of clearing a mile of trail is not much.

Senator WADSWORTH. It is not as if you took the whole 9,000 men and sent them off for a month to work at clearing trails.

Colonel BOGGS. I suppose if we do not get that money the troops will have to do it in order to keep the trails clear. It means just that much reduction in their proper training.

Senator LENROOT. That would not be much of a reduction.

Colonel BOGGS. Every reduction counts. It will count very seriously on the total of training.

Senator LENROOT. How long does it take to train a man in the Engineer Corps and train him properly?

Colonel BOGGS. It depends very much on what he is to be used for. In the first place, you have to train him as a soldier. It is one of the combatant arms, and he should learn to defend and attack, as well as the Infantry. Then, after that, he must learn his engineer duties.

Senator LENROOT. How long will that take?

Colonel BOGGS. To make him a trained soldier?

Senator LENROOT. Yes.

Colonel BOGGS. If we had enough trained noncommissioned officers you could make a trained soldier in nine months.

Senator LENROOT. Six months is the estimate, so far as Infantry is concerned.

Colonel BOGGS. It depends on the amount of training. We had men that went into the line in France that had practically no training.

Senator LENROOT. But it has been said many times before this committee that six months is required for the training of infantry.

Colonel BOGGS. Yes; of infantry.

Senator LENROOT. You mean nine months for both?

Colonel BOGGS. Yes.

Senator LENROOT. And the men are enlisted for three years? How long are they enlisted for?

Colonel BOGGS. I do not know what the proportion of three-year men is.

Senator LENROOT. Three years?

Colonel BOGGS. Also it is noted that six months is based on emergency training, and you can not get the ordinary enlisted man to accept training the way that he did during the war.

Senator LENROOT. Yes; I recognize that.

Senator HITCHCOCK. To do a little work now and then would be a little relief to him, would it not?

Colonel BOGGS. I think you will find they have real work, Senator.

I think I might say also that all of the labor on the canal is colored labor, and if you put the white troops in at the colored labor work there might be a psychological effect. Just how far that would go I do not know. But, in addition to that, you have to consider the climate down there, which is pretty severe on white troops working in the jungle.

Senator HITCHCOCK. If you called this military training it would go all right?

Colonel BOGGS. Well, you would probably kill a good many of the troops in doing it. Working in the jungle, without a breath of air coming in, is pretty bad even for the colored man, and if you put white troops in there—it is not out in the open, like building the Panama Canal itself, you know.

Senator LENROOT. It would not hurt a man in the first 10 minutes, anyway?

Colonel BOGGS. No, sir.

Senator HITCHCOCK. It would not take very long to do that job.

Senator WADSWORTH. Is there anything else?

Colonel BOGGS. No, sir; except I want to make a special plea for the roads in Hawaii and the "operations in the field." Those two, in my opinion, are of the very highest importance.

Senator HITCHCOCK. This roads item for Hawaii involves \$210,000?

Colonel BOGGS. Yes; and the other part \$117,500.

Senator WADSWORTH. Thank you very much.

SIGNAL CORPS.

STATEMENT OF COL. FRANK J. GRIFFIN, SIGNAL CORPS, UNITED STATES ARMY.

SIGNAL SERVICE OF THE ARMY.

Major BROWNE. The first item under the Signal Corps is on page 45, at the bottom of the page.

Senator WADSWORTH. Proceed, please, Colonel Griffin.

Colonel GRIFFIN. The original estimates of the Signal Corps under the item "Signal Service of the Army," covered by pages 45 to 47, and the top of page 48 included, were \$2,060,000.

The amount appropriated in the bill is \$1,750,000.

In an analysis of these figures I have made an assumption that the amount of the limitations beginning on line 23 of page 47 and ending on line 7 of page 48, are the amounts that the committee in the House felt were the proper amounts that should be expended upon those particular items. In other words, salaries and wages,

\$475,000; signal equipment for organizations, \$500,000; telephone service, \$375,000; motion and still pictures, \$75,000. I might add that this last amount was increased from \$50,000 to \$75,000 in the House.

Operation and maintenance of Camp Alfred Vail, \$75,000; pigeon service, \$5,000.

Now, gentlemen, the total of these six limitations is \$1,505,000.

There is another item, however, that is really a limitation, although it is not so expressed in the bill, and that is an item for telegraph tolls over commercial lines. That is a rather peculiar item in this, that we have never before had it in the Signal Corps. It has always been handled by the Quartermaster.

The Quartermaster made an estimate for the fiscal year 1923, and that estimate was in the sum of \$431,692.47. On examination when the matter was first presented to us in the Signal Corps estimates were made within the Signal Corps that it was rather definite that we could operate that situation within the figure of \$200,000, and the Budget officer presented the figure of \$200,000 in the Budget.

At the hearing before the House committee we did what has seldom been done; we went before the committee and told them that we did not want \$200,000; that we could get along on less. They naturally took off the money that we told them we could get along without, \$50,000, and I assume we received \$150,000 for telegraph tolls. Now, that is almost one-third of the original amount of the Quartermaster's estimate.

We feel we can get along on that, but we can not get along on any less in connection with it.

Senator HITCHCOCK. \$150,000?

Colonel GRIFFIN. Yes, sir.

Senator HITCHCOCK. For telegraph tolls?

Colonel GRIFFIN. Yes, sir; and we can only get along on it at the present time, because we have a radio net which is to a very great degree transmitting by radio over Government lines the telegrams that used to go over the wires of the commercial companies.

That is all right where we have radio operating, but this \$150,000 is to cover sections where there is no radio and where telegrams are necessitated.

Senator WADSWORTH. Is not that \$150,000 included in this \$1,750,000?

Colonel GRIFFIN. Yes, sir; I assume so.

Senator JONES of Washington. Then you are not asking for anything more?

Colonel GRIFFIN. No, sir; but I am explaining what I think will be a *reductio ad absurdum* in this situation. If we add this \$150,000 to the original limitations of \$1,505,000, and deduct the result from the total appropriation of \$1,750,000, we are going to get a balance of \$95,000 to take care of practically 14 essential items within the Signal Corps. It means a reduction in these 14 items in the Signal Corps of over 66 per cent, and that reduction never could have been contemplated in the House.

Senator HITCHCOCK. These are the maximum figures, though? You are not to exceed that amount?

Colonel GRIFFIN. I assume, sir, that the House in its extreme desire for economy was not giving us any authority to expend money beyond

our actual necessities. As a matter of fact, none of these limitations approximates the amount of money we requested for the particular expenditure. For example, salaries and wages, the first item, we estimated for \$525,000. That is a reduction from \$600,000 during the current year. The limitation thereon is \$475,000.

Signal equipment for organizations, we estimated at \$550,000. The limitation is \$500,000 as against \$1,000,000 for the current year.

Telephone service, estimated at \$390,000; the limitation contained in the bill is \$375,000. Appropriation for the current year, \$450,000.

Motion and still pictures, as I stated, that is where they made the increase. We estimated \$50,000 and then asked for \$25,000 more. We estimated because we had to within the Budget. The Budget insisted upon that figure, but the House committee gave us the \$75,000.

Operation and maintenance of Camp Alfred Vail we estimated at \$87,000. They have limited us to \$75,000, and our expenditures for the current year are \$100,000.

In pigeons we estimated at \$5,000, and we got \$5,000. This year we are spending—I think it is \$7,500.

So in each instance, before making that limitation, we in our estimates were down to the bone; and we have been cut still further in addition to that.

Assuming that situation to be correct, we have a number of items which must be taken care of and which are essential parts of the work of the Signal Corps; the research and development, the meteorological service, the training; gas and oil; nonunit supplies, printing, miscellaneous expenses, insular possessions, Panama miscellaneous expenses of corps areas; radio equipment of Army transports; books, maps, periodicals, and codes; construction of telegraph and telephone and cable systems; construction of radio systems; and miscellaneous expenses, Signal Corps at large.

For all of those items we have, if my assumption is correct, \$95,000.

RESEARCH AND DEVELOPMENT WORK.

Now, in research and development during the fiscal year 1921 we expended over \$81,000.

In 1922 our estimated expenditures are approximately \$108,000.

Our 1923 estimate as presented to the House was \$80,000.

If my figures are right, we will be able to allocate to that research and development \$27,200, and if that is all we get we might justly abandon it. Our research and development division is an organization whereby we adapt to Army needs the inventions in the communication activities of the commercial world. It has often been asked why we do not take the inventions of the commercial world and apply them to use directly in our communication apparatus in the Army. The answer is this, that practically all communication to-day is either radio telephone or telegraph. In all three of these lines of endeavor in the commercial world the apparatus is in every case a permanent, fixed apparatus. There is no necessity for mobility, for compactness, for lightness, for ease of carrying, and every one of these items is essential to the Army. To operate a radio set in the field we must have such a set as is easy to be carried and handled.

In the front line in the field, wherever it may be, it must be light; it must be compact; it must be absolutely synchronized and closely tuned up with the other stations, and at the same time it must be so tuned up that it will not interfere with them. Now, that does not exist in civilian apparatus. I mean by that all these various items of mobility and compactness and lightness do not exist. Therefore our research and development section must operate or handle or develop these particular sets of the commercial field in order to make them available for military purposes.

We have two big laboratories—really three. One is at Camp Alfred Vail, which is our main and testing laboratory. Another is in the office of the Chief Signal Officer, which is to a degree an overseeing laboratory. The third is in connection with the Bureau of Standards, where we operate in conjunction with them and get the benefit of their experience and advice and cooperation in all instances; and if we are limited, as I say, to \$27,000, approximately, on that particular item, why there is very little use of our continuing any such proposition, and our radio apparatus will deteriorate rapidly.

Senator HITCHCOCK. You spent \$91,000 this year—that is, you are spending \$91,000—for research and development?

Colonel GRIFFIN. Yes, sir.

Senator HITCHCOCK. Can you put in, in this connection, what you have accomplished by that?

Colonel GRIFFIN. Yes, sir. At the present time there are in process of completion at Camp Alfred Vail our sets known as 134 and 135 sets, which are designed for the Air Service, which are entirely a new development. There never has been a commercial project of the kind. It is the consummation of perhaps two years' work. Those sets were completed last week, I believe, and are now in process of being prepared for advertising for bids. That is the latest of the developments.

Senator HITCHCOCK. What does it do?

Colonel GRIFFIN. It is a set whereby airplanes can talk to each other and to the ground under them. Extending the distance, in clearness, in freedom from all the various faults that have existed in the previous radio apparatus between the airplane and the ground.

Senator HITCHCOCK. That is the most important?

Colonel GRIFFIN. That was the latest one, sir.

Senator HITCHCOCK. Can you state how that money was expended?

Colonel GRIFFIN. May I answer that by saying how we intended to expend the money for next year?

Senator HITCHCOCK. Yes.

Colonel GRIFFIN. The item research and development, \$80,000, as estimated for the year 1923, is proposed to be expended as follows:

Purchase of samples of latest foreign (principally German) wireless apparatus for examination and comparative trial.....	\$1, 500
Purchase of latest domestic radio products for examination and comparative trial	1, 000
Construction of experimental antennæ.....	500
	<hr/> \$3, 000

Below 1922 because of transfer of part of work to electrical and signal laboratory:

Development of multiplex telephony field lines (wired wireless).....	2, 550
Development of radio direction finder. A. S. and C. A. C.....	1, 500
	<hr/> 4, 000

One-man radio telephone for front line, infantry use.....	\$8,000	
Tank-radio telephone with concealed antennæ.....	6,000	
Amplifier for use with all wave lengths.....	2,500	
High-power tractor radio sets, Army and corps use.....	12,000	
Completion of program for airplane radio development.....	9,000	
Automatic recording for radio signals.....	5,000	
Radio intercept apparatus for intelligence service.....	6,000	
Purchase of improved type of laboratory equipment.....	1,500	
		-----\$50,000
Radio laboratory, McCook Field:		
Development of fixed antennæ for airplanes.....	2,200	
Development of radio navigating set for planes.....	1,800	
Elimination of ignition noise in receivers.....	1,000	
		-----5,000
Improvements in sound ranging for Artillery.....	2,000	
Gas engine for field-charging sets and pack sets.....	1,800	
Improvements in field-charging material for Field Artillery.....	3,600	
Improvements in field-charging material for Coast Artillery Corps.....	2,200	
Field wire carts.....	800	
Field wire and telephones.....	600	
		-----11,000
Bureau of Standards:		
Radio direction finders.....	1,000	
Field sound ranging.....	1,500	
Airplane detection by heat radiation.....	2,000	
Subaqueous sound ranging.....	1,500	
Calibration of instruments.....	1,000	
		-----7,000
Total		80,000

Senator HITCHCOCK. You take, for instance, where you are appropriating \$8,000 to development of a single radio set for action at the front.

Colonel GRIFFIN. Yes.

Senator HITCHCOCK. Has not that already been developed for the use of the police in some cities?

Colonel GRIFFIN. Not that I know of, sir. The Infantry is insisting that we prepare for them such an apparatus, they telling us, and it being our information and knowledge, that no such apparatus is at present in existence.

Senator HITCHCOCK. How do you estimate anything like the cost of \$8,000 for the development of that sort of thing? Is not that necessarily merely a vague sort of estimate?

Colonel GRIFFIN. That is the amount that we will spend on that particular apparatus.

Senator HITCHCOCK. Do you mean that you will employ civilian employees?

Colonel GRIFFIN. Certain civilian employees; but they are on our regular salary list. But we have to charge for each product we carry, an overhead charge.

Senator HITCHCOCK. Where is that \$8,000 spent? It is a small matter.

Colonel GRIFFIN. That will be spent within our laboratory, for material, for apparatus and general work in connection with this particular project. Certain of it will be down at the laboratory at Vail, for example. Other portions of it will be at the laboratory at the Bureau of Standards.

Senator HITCHCOCK. I thought they were using something of that sort in Pittsburgh now, for the police reporting at headquarters.

Colonel GRIFFIN. We know nothing of it; and even assuming such a police apparatus to be in existence, it would certainly not be available for our use, because of the fact that we have on a line considerably greater distance than the police ordinarily have. Our sets would be different. We use ordinarily, on the average, a 5-mile set. It is fair to assume that with the police, if there was such a set in existence, it would not be for that distance.

Senator HITCHCOCK. Yes; and within \$8,000 is your guess or estimate of what you can produce that set for?

Colonel GRIFFIN. Yes; based on the experience of our engineers who prepared this estimate.

Senator HITCHCOCK. This is exploitation work, really?

Colonel GRIFFIN. It is experimental work.

Senator HITCHCOCK. It would be found out later by civilians, would it not?

Colonel GRIFFIN. Possibly. But the development that will be necessary for us will probably not be found out by any civilian, because they are not concerned in the apparatus, for example, of a radio telephone for one man, to be carried with him on his back. There will be very few, if any, civilians that will be interested in that situation from a military standpoint.

Senator HITCHCOCK. Most of this money is to be expended for the salaries of experts?

Colonel GRIFFIN. The money for the salaries of experts is included in another itemization which I will take up later on.

Senator HITCHCOCK. I mean do you employ civilians to do this expert work?

Colonel GRIFFIN. Ordinarily not. We have the experts under another subheading of salaries and wages, and this money is not paid for that.

Senator HITCHCOCK. What is this \$8,000 paid for?

Colonel GRIFFIN. There is a certain amount of this that is given, for example, to the Bureau of Standards. We hand the money over to the Bureau of Standards and they do the experimentation to a degree. There is an item here of \$1,000, for example, to the Bureau of Standards. That is not all that the Bureau of Standards has received. During the current year they have received a total of at least \$10,000. My memory is not accurate on that, but at least that they have received.

There is other development work which we have done in the large laboratories. The General Electric Co., the Western Electric Co., and the Westinghouse Electric Co. have undertaken certain development work for us. It has been important for us because of our limited personnel or because of our limited facilities we were not able to handle it, and we have, therefore, given the contract for this development work under a contract proposition to these various larger electrical concerns for certain particular investigations.

Senator HITCHCOCK. Would you say that one-half of this \$8,000 goes to the employment of civilian experts? I am speaking of just this one item of the development of this one-man set.

Colonel GRIFFIN. I will say this, sir, that not one single penny of that \$8,000 goes to the employment of a single Signal Corps employee.

Senator HITCHCOCK. They are outside men altogether?

Senator LENROOT. They are employed by the Signal Corps.

Colonel GRIFFIN. They are employed by the Signal Corps, but are not paid out of this \$8,000. The apparatus we must use in these particular sets is high priced, the most high priced in the world. It is technical radio apparatus; it is the development work, in which there is an enormous wastage.

Senator HITCHCOCK. You have radio sets of all kinds now, have you not?

Colonel GRIFFIN. Yes, sir.

Senator HITCHCOCK. Do you have to buy now for this particular purpose?

Colonel GRIFFIN. Yes, sir; that is the very point. The sets we have to-day are obsolete to-morrow. The difficulty of the radio is exemplified by the experience we have all had in the last few months. I venture to say none of you gentlemen before the 1st of January, this year, had ever listened to a concert over the radio. To-day there is not a boy in the street that has not heard it, and 1 out of every 10 boys in the street has a set in his house.

Senator HITCHCOCK. In view of the development of civilian lines, will not the Military Establishment naturally get this benefit?

Colonel GRIFFIN. We will, sir; and that is the point I made in the beginning—that it is in the adaptation of the civilian development to military uses that this money becomes essential.

ONE-MAN RADIO SET.

Senator HITCHCOCK. Then, most of this \$8,000 that you estimate for the development of the one-man set will be for the purchase of apparatus, will it?

Colonel GRIFFIN. I am unable to say the exact proportion, sir, but a very considerable amount of it will. I have not the figures before me. I have what was handed me by the radio section.

Senator WADSWORTH. Prior to this time you have developed some radio sets that could be carried by one man, have you not, or one man on a horse?

Colonel GRIFFIN. We have our pack sets, which are able to be carried by mules.

Colonel SEOANE is the head of the Supply Division of the Signal Office.

Colonel SEOANE. From the Supply Office the Infantry want that one-man set, and they want to use it; and the laboratory or the engineering station proceed in developing such an instrument by first having an idea on the subject, utilizing the civilian outfit if they have one, probably consulting with some commercial concern that does work on order or according to instructions, and eventually building something which on first trial may suggest to the engineers at once that certain other additions will have to be made. Well, they patch on some other addition, and from that there may be some other addition patched on. After a while it may be entirely unsatisfactory, and they will proceed along some other line. Eventually when such a set emerges from the laboratory it is then passed to the Infantry for trial.

They will take it and tear it to pieces in various ways, just using an expression of the time, by finding fault with it or making a suggestion it should be lighter here or this improvement added to it, and it goes back to the laboratory to be torn to pieces again, and this development work goes on exactly like the development procedure in an automobile factory where automobiles are being designed for next year. They are criticized and altered. And that \$8,000 is just the estimate of the engineers that with that much money they can proceed along certain lines that will turn out something acceptable. It might only cost \$6,000, or next year we might come here again and say that is not a sufficient appropriation and we must have it continued.

Senator HITCHCOCK. Just a fishing excursion.

Colonel SEOANE. All laboratory work is.

Senator JONES. Colonel, what would you like to have done with this?

Colonel GRIFFIN. I think it will be possible to show you, sir, that this estimate as made by the Signal Corps is absolutely justifiable and should be sustained.

Senator HITCHCOCK. As made by the Budget, you mean.

Colonel GRIFFIN. As made by the Budget; yes, sir; with the exception of \$50,000 off for telegraph tolls which we recommend.

Senator HITCHCOCK. What was the total of the Budget?

Colonel GRIFFIN. \$2,085,000; and we asked that \$50,000 be taken off of telegraph tolls, and \$25,000 of that added to motion pictures, which they did, making the total amount \$2,060,000 which we asked for in the House.

Senator JONES. Do you want these limitations changed?

Colonel GRIFFIN. Yes, sir; I believe that the limitations should be changed.

Senator HITCHCOCK. Before you get that I would like to get the totals. The Budget is \$2,085,000?

Colonel GRIFFIN. Yes, sir.

Senator HITCHCOCK. Now, you take \$50,000 off?

Colonel GRIFFIN. And add \$25,000. That makes the net subtraction of \$25,000, so the total on the Budget would be \$2,060,000. That is the total of the bill as we should desire it.

Senator HITCHCOCK. I see.

Colonel GRIFFIN. Instead of \$1,750,000 on line 22, page 47, it would be \$2,060,000. The provisions of salaries and wages in line 23, which is stated at \$475,000, we requested \$525,000.

Senator WADSWORTH. \$525,000?

TELEPHONE OPERATORS.

Colonel GRIFFIN. Yes; \$525,000 is what we requested. This particular amount is used to a very great degree for the employment of telephone operators. We in the Signal Corps have the duty of all communication apparatus and as part of that apparatus we have the handling of the telephone. As I stated in the last hearing, there are a total of 198 Government installation of a value of \$1,335,000. Those telephones during the current year are operated by 242 enlisted telephone operators and by 33 civilian operators.

Senator LENROOT. What was the aggregate of their salaries?

Colonel GRIFFIN. The civilian operator gets about \$75 a month average.

Senator LENROOT. Have you not aggregated some of these different headings of what this \$525,000 is made up?

Colonel GRIFFIN. Yes, sir; I have them under the heading, if you will allow me to finish on this particular thought, sir.

Senator LENROOT. Go ahead.

Colonel GRIFFIN. An enlisted operator costs us about \$125 a month and we get better service from a civilian operator at \$75 a month, but we can not hire them because we haven't got the money.

Senator HITCHCOCK. Now, just explain why that is.

Colonel GRIFFIN. Because of the reduction. In this year we had originally \$600,000 for salaries and wages. We had a very considerable number of civilian personnel operating our telephones. I am not speaking of clerks now, sir. That is an entirely separate subject. But of operators in the field. We paid those operators approximately \$70 to \$75, sometimes \$80 per month. When our appropriation was cut down we had to discharge those civilian operators and put enlisted men in their places, and we were paying net approximately \$50 per month for inferior service to a degree.

Senator HITCHCOCK. What do you mean by the \$50 a month?

Colonel GRIFFIN. The difference between the \$75 and the \$125 which the enlisted man costs us.

Senator HITCHCOCK. How can it cost you \$125?

Colonel GRIFFIN. Figuring the wages of an enlisted man, his upkeep and all of the expenses in connection with the keeping of all enlisted man in the Army, his net cost to the Government approximates \$125 per month.

Senator HITCHCOCK. Do you mean then we will have that number less of enlisted men if we employ these civilian operators.

Colonel GRIFFIN. There are not so many of them to employ.

Senator HITCHCOCK. But are we not to that expense of \$125 a month just the same for the enlisted men?

Colonel GRIFFIN. Possibly, sir; but they would be on other duties which would be military duties.

Senator HITCHCOCK. You do not mean to say the Treasury will save \$125 a month, or the difference between \$125 a month and \$75 a month, by the employment of civilian employees as against the employment of enlisted men?

Colonel GRIFFIN. Yes, sir.

Senator HITCHCOCK. Then you must mean a reduction of the Army to at least that extent.

Colonel GRIFFIN. No, sir; because there are other duties that these men should be employed upon which are military duties.

Senator HITCHCOCK. How do you figure a reduction in the cost upon the Treasury? That is what I am getting at.

Colonel GRIFFIN. I do not think I quite get your point, sir.

Senator HITCHCOCK. Here we have so many enlisted men and we pay them so much. Now, if we take 100 of those enlisted men that might be performing other duties and do assign them to telephone service, the cost to the Government is the same, is it not?

Colonel GRIFFIN. But the service is inferior.

Senator HITCHCOCK. That is different. We are not talking about inferior service. You are giving us the impression we are saving \$50 a month to the Treasury.

Colonel GRIFFIN. I am sorry if I gave you that impression.

Senator HITCHCOCK. You did.

Colonel GRIFFIN. But the impression I am trying to convey is that the idea of putting enlisted men upon this particular class of work is absolutely unbusinesslike and is wrong from a business standpoint. We are doing work with \$125-a-month men that should properly be done with \$75-a-month girls and would be done better. That is my thought, sir.

There is another point in connection with this same situation and these conditions: Under our telephone contracts where we have no money to hire civilian operators and where we have no men enlisted to put in the job—that has occurred in a very, very great number of cases—we are obliged to contract with the telephone companies to furnish the men and to pay them out of our appropriation for telephone service and which in every instance costs us the \$75 or \$80 per month plus 10 per cent for the supervision by the telephone company. It is in every instance the same girl that does the work: she is paid exactly the same money, but the Government is paying 10 per cent, and the reason for that, sir, is that the appropriation for salaries and wages has been reduced to so low an amount that it is impossible to properly function in a manner that is efficient or businesslike.

Senator LENROOT. Take an enlisted man who has received his training, Colonel, and do you wish this committee to understand that if he was not performing this service of telephone operator he would be rendering a service to the Government—assuming he is receiving his payment now—of \$1,500 a year? Is that the idea you wish to convey?

Colonel GRIFFIN. I think so, sir. In the Signal Corps every one of our men is a specialist. The very great majority of men in the Signal Corps are able to go in the open market to-day and obtain a very, very considerable amount in excess of their salary.

Senator HITCHCOCK. You did not get my thought. Are those men actually being employed, if they are not employed in the Signal Service, aside from training, and rendering a value to the Government of \$125 a month?

Colonel GRIFFIN. Alaska—

Senator HITCHCOCK (interposing). I am speaking now generally of the enlisted men. There are cases, of course, where they do.

Colonel GRIFFIN. Well, at least 10 to 20 per cent of our enlisted men are in Alaska operating our radio system there.

Senator HITCHCOCK. There is a place where they are doing it.

Colonel GRIFFIN. Our radio net is operated entirely by our enlisted men, a means by which we propose to cut down the telegraph service from \$400,000 to \$150,000. We have 3,000 men in the Army to-day, and they are the means whereby this radio net is operated. We have certain other men who are in our Signal battalions, active with troops and in the various organizations, in the first two instances the return to the Government is far in excess of their salaries.

Senator HITCHCOCK. Colonel, do you not think if these men could go out in civilian life and get as much pay for the work they learn

in the Signal Corps that they ought to be able to do the work of a \$75 girl in the telephone service?

Colonel GRIFFIN. It is the experience of every business house that a girl gives better service over the telephone.

Senator HITCHCOCK. She has a sweeter voice and is more agreeable, but I do not see why a man of that kind could not render good service.

Colonel GRIFFIN. There is a peculiar factor about that which I want to bring out, and that is this: During the World War everyone would think in service in France men would be superior to girls. As a matter of fact, we had over in France—brought over from America—girls whom we trained in French, English, and the method of handling the telephone, and those girls in France were conceded to be one of the most valuable assets of the entire telephone service in France and far more valuable than the men could be.

Senator HITCHCOCK. In the civilian life even elevator boys and janitor boys run telephone exchanges in the apartment houses.

Colonel GRIFFIN. Those telephone exchanges are very small; they are not really a switchboard; they are not exchanges to the extent that you would have 200 to 300 drops on a board. On the ordinary switchboard it does not take much experience to do it.

Senator HITCHCOCK. Have you not some of that size in your service?

Colonel GRIFFIN. Some few. Most of ours are rather extensive in size.

Senator LENROOT. What do you use in the field?

Colonel GRIFFIN. Men entirely.

Senator LENROOT. How many men? How large a service is it?

Colonel GRIFFIN. Switchboard, 10 to 50 lines.

Senator LENROOT. Is it not necessary to have men trained for that service?

Colonel GRIFFIN. They are trained thoroughly for that particular branch.

Senator LENROOT. Then I gather the only criticism you have is that no man can fill the job as well as the girl?

Colonel GRIFFIN. No, sir; my criticism is this, very definitely—

Senator LENROOT. I meant aside from the matter of cost. I meant as far as efficiency was concerned.

Colonel GRIFFIN. I have been from 25 to 30 years in business life, and would much prefer to have a girl, if permitted, on the telephone than the brightest man. I get better service out of her.

Senator LENROOT. I say it is just the sex that makes the one more efficient in that particular place?

Senator HITCHCOCK. Still, as a business man, if you have to keep a certain number of men in your employ anyhow, would it not be better to have one do this work than to bring in an outside girl and not only pay the man but pay the girl also?

Colonel GRIFFIN. As a matter of fact, we have other duties for them, sir, that are unperformed, and we haven't got enough men to-day to do the work.

Senator HITCHCOCK. If these girls were brought in, would these men be discharged?

Colonel GRIFFIN. No, sir; they would be put on other more important work.

Senator HITCHCOCK. My complaint against this whole Army organization is that you have entirely too many civilian employees. The whole bill is honeycombed with civilian employees.

PERCENTAGE OF CIVILIAN EMPLOYEES.

Senator WADSWORTH. What percentage is there of civilian employees?

Colonel GRIFFIN. In the particular Signal Corps outfit so far as civilian salaries are concerned, I think I can put in a very few words just exactly what salaries are being paid by the Signal Corps. May 1, however, before doing that give one of the great defects of putting an enlisted man on a switchboard in an office? His duty is in the field, and as such he must be in constant touch with operations. Even in the front when he is running a field switchboard it is a case of him being with his organization, with his unit, constantly. If he is going to operate and if he is on a switchboard, he is absolutely out of touch with any tactical organization, and he becomes stale.

Senator WADSWORTH. And could not walk 5 miles.

Colonel GRIFFIN. He is stale and he is out of date in six months. He is no good to us nor to anyone else, because unless our men are on their toes and up to date in this enormous stride that is being made to-day in radio, which is our great thing, we are absolutely lost, and he is lost unless he keeps up with us.

Major BROWNE. May I say a word in regard to the civilian employees in regard to what Senator Hitchcock just said? The impression is pretty general that we are still suffering from an excess of civilian employees, due to the number employed during the war. We have recently made an investigation of that matter, and on page 1492 of the hearings before the House committee is a statement that the pre-war strength of the civilian field forces under the War Department was approximately 43,250.

Senator LENROOT. On what date was that?

Major BROWNE. That was about the fall of 1916.

Senator LENROOT. That was at the time we were increasing the Army very rapidly.

Major BROWNE. Of course, it was before the—

Senator LENROOT (interposing). Going back a little further than that to the normal.

Major BROWNE. I think that was approximately the normal strength. That was before there was any great increase. The strength under the estimates for 1923 is 46,000.

Senator WADSWORTH. In other words, you are down to within 4,000 of what you were before the war?

Major BROWNE. And that 46,000 includes also the Chemical Warfare Service and Air Service, which were nonexistent at that time.

Senator LENROOT. Can you give us the estimate for the total for the next fiscal year?

Major BROWNE. Forty-six thousand.

Senator LENROOT. What was it this year?

Major BROWNE. The total strength on December 31, 1921, was 49,531.

Senator WADSWORTH. I did not realize it had come down so close to 1916.

Colonel GRIFFIN. As a matter of fact, sir, in the office of the Chief Signal Officer the civilian employees in 1914-1916 were 52; to-day we are asking for next year for 62, on increase of 10 over 1914—and in spite of what I took some little time to say in the last hearing an enormous increase in activities of at least 3 to 4 times the number of activities we had then, and with an increase of approximately three times the amount of personnel that were in the Signal Corps in 1914.

Senator HITCHCOCK. We have at the present time about 30 per cent the number of civilian employees in the Army that we have military men in offices.

Senator WADSWORTH. Yes; but it is a smaller percentage than in 1914.

Senator HITCHCOCK. Yes; I am amazed at the figures of 1914.

Senator WADSWORTH. There is a never-ending contention on this matter of civilian employees. It resolves itself down to two questions—how many soldiers will you put on nonmilitary work in times of peace and how many civilians will you put on semimilitary work in times of peace? In the old days every teamster was a civilian; every truck was driven by a civilian teamster paid by the day or by the month, and they decided it was a very bad system because they could not enforce discipline among the civilians who were accompanying the troops on marches, and so they gave it up, and enlisted men have done the teaming since. Under that same system the modern motor-truck driver would be a civilian. Some people will say it is not a military job; but it is a military job when the truck is accompanying troops and hauling supplies to them. On the other side is to take a soldier from the ranks and put him on the telephone in the central office, sitting on a little stool eight hours a day doing purely civilian work and then wonder whether he will be a soldier at the end of six months.

Senator HITCHCOCK. On this page you state the practical strength of civilian field forces.

Colonel GRIFFIN. Yes, sir.

Senator HITCHCOCK. It does not include the civilian employees around the office in Washington?

CIVILIAN FORCE IN WASHINGTON.

Major BROWNE. It excludes only the departmental employees.

Senator HITCHCOCK. What do they number?

Major BROWNE. I have not the figures on that; something less than 3,000 before the war. It is something over 3,000 now.

NOTE.—The civilian force in the War Department proper on April 6, 1917, was 1,747; the strength on April 11, 1922, was 3,751; and the strength provided in the Budget for 1923 is 2,498. The present strength includes the forces required in cleaning up the activities of the war, such as 600 employees in The Adjutant General's office. It also includes about 290 employees in the offices of the Chiefs of Air Service and Chemical Warfare Service.

Colonel GRIFFIN. I can give you the figures for the Signal Corps proper. We have estimated for 1923 for 340 civilian employees. At the present time we have 363 civilian employees. I haven't got any

figures as to what we had in 1914, but those figures of 340 for 1923 are approximately 10 per cent of our enlisted and commissioned strength. We have 3,300 total commissioned and authorized.

Senator HITCHCOCK. You have something like 360 civilian employees now?

Colonel GRIFFIN. Three hundred and sixty-three now, and we are asking for 340 for next year.

Senator LENROOT. That is an average of a little over \$1,500 apiece. Do you know the highest salary paid?

Colonel GRIFFIN. Yes, sir; I believe we are paying one man, consulting radio engineer, \$4,800 per year—one. That is the gentleman who is at the head of his class in the world, and he is really our consultant in connection with civilian radio activities.

Senator LENROOT. How many of these low-priced \$75-a-month operators are there; a large number of those?

Colonel GRIFFIN. There are not many, sir. On March 20, 1922, we had 33 of those low-priced civilian operators only. We could have used another 75 or 100 if we had the money, and could have saved money doing it. That was our one thought, and that was my thought in stating the situation.

Senator WADSWORTH. You started in in answer to Senator Jones's question to say what you would like done.

Colonel GRIFFIN. I would like, sir, or the Chief Signal Officer would like, the original estimate as presented by the Budget and which was defended beginning at page 715 of the House testimony, and which appears to us to cover pretty thoroughly the entire situation and analyzes to a very considerable degree the different items under consideration.

METEOROLOGICAL SERVICE.

The item of research and development was taken up merely as typical of the whole. I might, if the committee could spare the time, discuss for a minute the meteorological service.

CIVILIAN EMPLOYEES.

Senator JONES. Colonel, I wish you would tell me what you want here. You said you want \$525,000 in place of \$475,000?

Colonel GRIFFIN. Yes, sir.

TELEPHONE SERVICE.

Senator JONES. What do you want in place of \$375,000?

Colonel GRIFFIN. Which is that, sir?

Senator JONES. Telephone.

Colonel GRIFFIN. Telephone service we have asked for \$390,000.

Senator JONES. You could not get along with \$375,000 very well?

Colonel GRIFFIN. No, sir.

SIGNAL EQUIPMENT.

Senator JONES. Then in place of \$500,000 what do you want?

Colonel GRIFFIN. We have asked for \$550,000; \$75,000 for photography is correct; \$75,000, the other item on line 6, page 48, for

maintenance of Camp Alfred Vail, should be increased to \$87,000; the item \$1,750,000, on line 22 of page 47, should be increased to \$2,060,000.

Senator LENROOT. If the committee should determine upon a cut in your estimate and the cuts from the limitations be restored and a cut made in the other part that is not limited, assuming that was all you were to get, this \$1,750,000—

Colonel GRIFFIN. We would be obliged to cut our entire service.

Senator LENROOT. I see.

Colonel GRIFFIN. Yes, sir. And, for example, in our telephone service, where we have been limited to \$375,000 in the bill, the probabilities are that we would be obliged to cut that down to a sum approximating \$300,000, or an item in that neighborhood, depending upon the exigencies of the case.

Senator LENROOT. They have cut you \$120,000, I take it, in the items in the limitation, which leaves a cut in the amount appropriated of \$280,000.

Colonel GRIFFIN. Yes, sir; but the \$280,000, sir, if I may emphasize, includes this telegraph money, which is a brand-new thing to us, which we never had before, which we estimated and attempted to play the fairest in the world, where we cut the original estimate in thirds and volunteered a further saving of \$50,000 as an evidence of our good faith, after the Budget had approved a larger amount; that is also a limitation, because that work must be done. It is not work that we do for ourselves, but that the rest of the Army does, and with that deducted we have got only \$95,000 left to do it; it is a cut of 66 per cent of practically the entire rest of our activities, and that is what hurts, sir.

Senator LENROOT. I do not quite understand this telephone matter. Is not that telephone matter covered in the limitations?

Colonel GRIFFIN. I did not get that.

Senator LENROOT. The \$375,000 limitation covering the telegraph and telephone service—does not that cover that item?

Colonel GRIFFIN. Cover which item?

Senator LENROOT. The telephone and telegraph?

Colonel GRIFFIN. No, sir; it does not cover telegraph: This is "existing Government-owned telephone and telegraph service."

Senator LENROOT. It says "expended for commercial and existing Government-owned telephone and telegraph service."

Colonel GRIFFIN. That does not cover the payment of telegraph tolls over commercial lines; no, sir.

Senator WADSWORTH. The language of the—

Colonel GRIFFIN (interposing). The language might seem to include it, but in the appropriation and the estimate, the original estimate as handed in showed the request of the Signal Corps was for \$390,000 for telephone service under that particular item which has been carried for a considerable length of time.

TELEGRAPH TOLLS.

The other item was an item in which we requested \$200,000 for telegraph tolls over commercial lines; you will notice, if you have the committee draft of the bill, there is an elimination of one word, "not," somewhere in that bill.

Senator WADSWORTH. That is on the bottom of page 46.

Colonel GRIFFIN. And that is where we got the authority for the expenditure.

Senator WADSWORTH. Just a moment. We want to have the record show that. Line 25, page 46, under the budget after the word "Army" was inserted the words "but not" so that it read "but not including payment for individual telegraph messages transmitted over commercial lines."

Senator LENROOT. Has this limitation been in before, Colonel?

Colonel GRIFFIN. Not before this year.

Senator LENROOT. In the exact language?

Colonel GRIFFIN. Yes, sir; this is a copy of last year's language when we did not have the telegraph tolls.

Senator LENROOT. And you fellows never raised a question about it?

Colonel GRIFFIN. We never have had occasion to handle it.

Senator WADSWORTH. The word "telegraph" on the top of page 48, line 1, has been a surplusage all these years.

Major BROWNE. They have operated Signal Corps telegraph systems.

Senator WADSWORTH. Then it has been surplusage as far as commercial use?

Major BROWNE. Yes.

Senator WADSWORTH. I can remember very well this language in the last year's Army appropriation bill and the year before and the year before that. It has always read "existing Government-owned telephone and telegraph service."

Major BROWNE. Yes, sir.

Senator WADSWORTH. It ought to be redrafted.

Senator LENROOT. I do not see why that language does not cut out your totals.

Colonel GRIFFIN. There is every reasonable chance that it does.

Major BROWNE. I think that covers more than the House committee intended it to cover.

Senator WADSWORTH. What covers more?

Major BROWNE. The language that is in the bill; I think the House committee did not intend to include in that the amount for telegraph tolls, but that language does really include that.

Senator WADSWORTH. Certainly. It always has included it. There is nothing new about the language, but there is something very importantly new about the practice.

Colonel GRIFFIN. The practice is brand-new of our having the payment of telegraph tolls, and for that purpose we appeared before the House committee and asked for \$150,000 and believed we got it. We also asked for \$390,000 for the payment of commercial and existing Government-owned telephone and telegraph service, and we got \$375,000 for that.

Senator HITCHCOCK. Which leaves you how much short?

Colonel GRIFFIN. But if we add the \$150,000 presumed to be included in this \$1,750,000 we are way short.

Senator WADSWORTH. You have nothing left?

Colonel GRIFFIN. We have practically nothing left at all. That is the point I tried to make in the beginning. There is only \$95,000

left, if we have that \$150,000 which seems to have been omitted. I tried to convey the thought in the beginning there was an error here and that an analysis of the thing showed it was not figured in accordance with the estimate at all and that there was something left out.

Senator JONES. Let me ask you this, Colonel, what effect does leaving out the words "but not" on line 25, on page 46, have?

Colonel GRIFFIN. That makes us pay for individual telegraph messages transmitted over commercial lines.

Senator LENROOT. Right at that point, Senator, if I may interrupt you?

Senator JONES. Yes.

Senator LENROOT. Where do you get that direction to pay those tolls?

Colonel GRIFFIN. In that wording, line 25, on page 46, and line 1, on page 47; we assume that the money is given us to pay for them.

Senator LENROOT. Where do you get it?

Colonel GRIFFIN. \$1,750,000.

Senator LENROOT. But not including payment.

Colonel GRIFFIN. That is the last year's and the current law; but this is next year's law, which makes us pay it.

Senator WADSWORTH. We strike out the words.

Senator LENROOT. Oh, that was done intentionally?

Colonel GRIFFIN. That was the intention.

Senator JONES. What I am getting at is this: Is there anything in the current law in another item which provides for the payment of individual telegraph messages over commercial lines?

Colonel GRIFFIN. Yes, sir; in the quartermaster's act.

Senator JONES. How much is provided there?

Colonel GRIFFIN. I am not sure, sir. We did not pay it this year. We had no expenditures under it.

Senator JONES. That is the reason, then, they left out the words "but not"?

Colonel GRIFFIN. Yes, sir; the words "but not" were originally and intentionally left out during the next year, 1923.

Senator JONES. I wanted to find out how much that covered.

Major BROWNE. The amount was \$100,000 for the current year for telegrams.

Senator JONES. Are you using it for that purpose?

Colonel GRIFFIN. Yes, sir; the quartermaster—

Senator JONES. Do you need it for that purpose?

Colonel GRIFFIN. The quartermaster is using it.

Senator JONES. You do not need it, then?

Colonel GRIFFIN. We haven't got it; the quartermaster has got it.

Senator HITCHCOCK. But the new bill cuts out the quartermaster and gives it to you?

Colonel GRIFFIN. Yes, sir.

Senator JONES. And you have to cover it in this \$1,750,000?

Colonel GRIFFIN. Yes, sir. The quartermaster's estimate for the fiscal year 1923 was \$430,000.

Senator HITCHCOCK. You say he has only had \$100,000 for this item heretofore?

Colonel GRIFFIN. Yes, sir; and the office of the Chief of Infantry had. I think, \$50 for his tolls for the year 1922.

Senator HITCHCOCK. Well, he got through with it.

Colonel GRIFFIN. He did not, sir. I will not say that, but I know we gave him some of ours.

Senator HITCHCOCK. And what the quartermaster got along last year with on \$100,000 you want to have increased to how much?

Colonel GRIFFIN. \$150,000.

Senator HITCHCOCK. Fifty per cent increase?

Colonel GRIFFIN. Yes, sir.

Senator WADSWORTH. The quartermaster asked for \$400,000!

Colonel GRIFFIN. Yes, sir; \$430,000.

Senator WADSWORTH. On the theory he could not get along on it!

Colonel GRIFFIN. Yes, sir.

Senator SUTHERLAND. Then he has not got along on the \$100,000?

Colonel GRIFFIN. He has got along.

Senator SUTHERLAND. I thought you said you transferred him some of yours?

Colonel GRIFFIN. Yes; we transferred something like \$50 or \$60 out of our money and the Quartermaster has run around practically begging to all of the services, "If you have got telegraph money I have got some folks that need it badly," and those that could spare it gave it to him, but very few could spare it.

Senator HITCHCOCK. And instead of telegraphing he used the mails?

Colonel GRIFFIN. He used the mails and to a great degree we are using our radio net. I am frank to say I know of cases where the money was so short in the telegraph service of the Army that they were tied up completely. They got along simply by not doing things that ought to have been done.

Senator HITCHCOCK. What is the sample communication?

Colonel GRIFFIN. Suppose you want an officer at Seattle to proceed immediately to San Francisco to do an emergency job; if you have got the money in the telegraph fund you telegraph him.

Senator HITCHCOCK. Those decisions might be reached a day or two earlier.

Colonel GRIFFIN. Some decisions have to be reached immediately.

Senator HITCHCOCK. I have known cases where if you tell a man he can not telegraph, he thinks in advance.

Colonel GRIFFIN. Injecting a thought into that, during the Mingo trouble we were extremely limited in our appropriation for telephone moneys, and the Mingo situation gave us considerable anxiety from the fact bills were coming in for long-distance telephone calls from the seat of the difficulties to headquarters in Washington. They were absolutely essential from a business and military standpoint. and if that matter had continued for a very much greater period we would either have had to cut down essential activities or have exhausted our appropriation. Our factor of safety was so extremely small that a little bit of an occurrence such as that put us very, very close to the verge of an excess expenditure, and it is the same thing applied to the telegraph.

Senator HITCHCOCK. Using the telegraph in emergencies—

Colonel GRIFFIN (interposing). This also includes cables, I might say; the question of cabling overseas to military attachés is a matter that is included under this particular situation—or War Department employees.

Senator LENROOT. How much do you want that \$375,000 increased?

Senator WADSWORTH. \$390,000.

Senator LENROOT. That will cover all telegraph and telephone service?

Colonel GRIFFIN. \$540,000, sir, unless you change that language to provide for \$150,000 for telegraph tolls, or else eliminate the word "telegraph" on the top of line 1.

Senator LENROOT. Or put in the words "but not"?

Colonel GRIFFIN. Eliminate the words "and telegraph" on line 1, page 48.

Senator JONES. Then, would you want another appropriation to cover telegraph service?

Colonel GRIFFIN. No, sir; that will be covered in the event the \$1,750,000 is increased to \$2,060,000, but without a limitation. There will be no limitation in it, sir.

Senator JONES. It will be covered by what is left?

Colonel GRIFFIN. Yes, sir.

Senator WADSWORTH. I think myself the Signal Corps is up against it here. I do not see how they are going to pay the telegraph bills to save their necks.

Senator LENROOT. I was going to ask you was this estimated following the present law?

Colonel GRIFFIN. Yes, sir.

Senator LENROOT. Excluding telegraph?

Colonel GRIFFIN. Yes, sir.

Senator LENROOT. From this \$2,085,000?

Colonel GRIFFIN. In the original estimate as submitted, if I can show you—if you will notice, on the last line there, "telegraph tolls over commercial lines" line 20, right there.

Senator LENROOT. Oh, yes.

Colonel GRIFFIN. Now, line 3, telephone service, \$390,000.

Senator LENROOT. I understood that, but I was wondering whether they were following the present law in that estimate excluding from from the \$2,085,000 the telegraph.

Senator HITCHCOCK. Of course, that contemplates an increase in the telegraph appropriation over the current year.

Colonel GRIFFIN. Yes, sir.

Senator HITCHCOCK. And the increase amounts to \$50,000?

Colonel GRIFFIN. Yes, sir.

Major BROWNE. The Budget as drafted changed the language.

Senator LENROOT. That is what I was asking about. Did the House follow the Budget language?

Major BROWNE. Yes, sir.

Colonel GRIFFIN. But the Budget language, as you brought out, was possibly dangerous, because it included the words "and telegraph" on line 1 of page 48.

Senator LENROOT. As far as the limitation is concerned?

Colonel GRIFFIN. Yes, sir. If that limitation should read as it was intended to read for the commercially and Government-owned telephone service and eliminated the word "telegraph" on line 1 then we would be perfectly safe before the comptroller or anyone else.

Senator LENROOT. That is, you would have \$390,000?

Colonel GRIFFIN. For telephone service; and the rest of it would be an unlimited amount for telegraph tolls.

FURNISHING MATÉRIEL TO MILITIA BUREAU WITHOUT REMUNERATION.

There is one other item, sir, in that bill that is of rather considerable importance, and that is the item that is otherwise contained in the bill whereby we are charged with the duties of furnishing all matériel to the Militia Bureau without remuneration.

Senator JONES. Where is it in the bill?

Colonel GRIFFIN. Major Browne will locate it. In the meantime I will go ahead.

Under the present statute as it exists we are entitled to remuneration from the Militia Bureau for a certain proportion—certain articles in connection with their equipment. During the current fiscal year, July to March, 1922, we have received from the Militia Bureau a total sum of \$301,606, and for which we have given them matériel, and we have given them free and for which we have received no remuneration whatever matériel valued at \$134,000. The total amount that we anticipate will be delivered to them during the entire fiscal year will be about \$400,000 reimbursement and about \$600,000 free issue. In other words, if we are to purchase for them next year their entire matériel we will be obliged to dig out of our own appropriation, assuming that it will be approximately the same as it will be this year, and it will—we will have to take from our own appropriation \$400,000, and we haven't got it. We have got \$95,000 for our own work, and if there is any addition—

Senator JONES (interposing). Colonel, this proviso on page 81 that directs you to do this out of surplus stores and matériel now on hand—

Colonel GRIFFIN. We are doing that, sir; that is what our \$600,000 is. There is another item in there—I have not my own marked copy in there—but there is an item in the bill whereby the Militia Bureau gets all their material without reimbursement.

Senator LENROOT. Is that carried in the existing law?

Colonel GRIFFIN. No, sir; it is not in the existing law.

Senator LENROOT. This is something new in the bill?

Colonel GRIFFIN. Yes, sir.

Senator JONES. I would like to know where that item is.

Colonel GRIFFIN. The item is on page 82, line 6. "none of the funds appropriated in this paragraph"—

Senator JONES. Beginning on line 4?

Colonel GRIFFIN. Yes, sir; the words "signal matériel."

Senator JONES. And that is "none of the funds appropriated in this paragraph shall be used for purchase of arms, field artillery, engineer or signal matériel, public animals, or chevrons"?

Colonel GRIFFIN. Yes, sir.

Senator JONES. Where is the provision which requires you to furnish matériel for the National Guard?

Colonel GRIFFIN. If they do not get it from us they can not get it from anyone else.

Senator JONES. There is no provision for you to purchase it?

Colonel GRIFFIN. Well, we feel that it is our duty to equip the Army of the United States. The statute charges us with that duty and it has been the practice. That is new legislation, that particular clause there, and the statute has heretofore authorized the expenditure of National Guard funds for the purchase of signal matériel.

Senator JONES. What you are presenting to us is that there is nothing here that makes any appropriation for you to buy these things with?

Colonel GRIFFIN. Yes, sir.

Senator JONES. In other words, here is your express provision saying none of this money can be used for that purpose.

Colonel GRIFFIN. And, inferentially, the only money that can be used for it is Signal Corps money, and I am presenting to the committee the fact we have no money to use for it.

Senator JONES. Do you want to urge that we provide an additional appropriation, and, if so, how much?

Colonel GRIFFIN. Well, we were not consulted in this particular situation. I believe the Militia Bureau in their consideration of that thing would be the people to take that up with you.

Senator WADSWORTH. In that event, as I understand it, you would be merely the purchasing agent of the Militia Bureau?

Colonel GRIFFIN. That is what we are, sir, to the degree that we spent \$400,000 of their money and we spent \$600,000 of our own. That is what we have been doing during the current year.

Senator WADSWORTH. What was your entire appropriation this year?

Colonel GRIFFIN. A considerable amount of this free issue was out of stock.

Senator JONES. What provision of law authorizes you to take that out of your money for that purpose?

Colonel GRIFFIN. The issuance of stock to supply the Army.

Senator JONES. I take it that is what the House wants to stop.

Colonel GRIFFIN. They seem in this particular provision here to be making it absolutely definite that we must do it out of our own funds. There are no other funds to buy signal matériel except Signal Corps funds. That is definitely in the statute.

Senator JONES. This paragraph, beginning on page 78, line 23, "to procure by purchase or manufacture and issue from time to time to the National Guard upon requisition," and so on: that is the provision under which you spend this money for the National Guard, is it not?

Colonel GRIFFIN. No, sir; because there is a specific statement here that it is not applicable to signal matériel.

Senator JONES. I have not read it all, but the paragraph starts out expressing that the purpose of it is "to procure by purchase or manufacture and issue from time to time to the National Guard upon requisition of the governors of the several States," etc., "such number of United States service arms, with all accessories," etc. Now, then, that authorizes you to buy certain things for the National Guard. Now, on page 82 the clause shows "none of the funds appropriated in this paragraph shall be used for purchase of arms, field artillery, engineer or signal matériel, public animals, or chevrons."

Now, did you buy \$400,000 worth of those things during this current year out of this fund—oh, this is new language?

Colonel GRIFFIN. This is new language; yes, sir.

Senator JONES. They do not want you to buy any of those things out of this money?

Colonel GRIFFIN. Yes, sir.

Senator JONES. If you do not buy them out of this money, is there any fund out of which you could buy them?

Colonel GRIFFIN. Only our own Signal Corps funds, and we have not any such. There is no provision made as a substitute for that. This is Militia Bureau money that we are discussing right now.

Senator LENROOT. Do you carry a reserve of all these things?

Colonel GRIFFIN. To a degree. That reserve is right straight down to the rock to-day.

Senator LENROOT. The House committee could not have had in mind that you would get enough from the reserve?

Colonel GRIFFIN. No; this \$600,000 I have given them is to a degree our reserve. I might illustrate that still further by saying that we have to-day on sale absolutely no surplus matériel in the way of radio apparatus. Both Members of the House and Members of the Senate have been inquiring from us under this present big jump in radio activities whether or not we have any radio apparatus for sale. We have not. Every bit of our radio apparatus that is not in actual use by the Signal Corps is being turned over to the National Guard. From that I might except certain vacuum tubes that we are holding for our own reserve supply. But in the operating sets it is the intention to give to the National Guard without remuneration or compensation every one of those sets. It is done in the thought and in the knowledge that next year we will be absolutely unable to do anything on that for them, even with our appropriation restored to its original position.

Senator WADSWORTH. In other words, next year the National Guard, if it needs any more signal equipment or matériel, will have to acquire it from its own appropriations, the Signal Corps being the purchasing agent?

Colonel GRIFFIN. And this act prohibits them from acquiring it from their own appropriation.

Senator LENROOT. Was there any explanation of this on the floor?

Colonel GRIFFIN. None that I know of. I was away at the time and just noticed it when I came back.

Senator JONES. Would you like that language stricken out?

Colonel GRIFFIN. I would hesitate seriously to present anything in connection with the Militia Bureau except our thought in connection with it. I think the Militia Bureau would be very glad to have the matter considered, but I could not speak for them.

Senator LENROOT. I notice in my copy the words "or reserve" were not in the estimate.

Colonel GRIFFIN. We have no reserve.

Senator LENROOT. But if those words "or reserve" were stricken out your appropriation would be fully protected.

Colonel GRIFFIN. We are protected to the degree that if we have not the money they will not get it.

Senator LENROOT. You might have some reserve, and any reserve you had you would be called on under this proviso to turn over.

Colonel GRIFFIN. Even the full amount of our request of \$2,060,000 gives absolutely no chance of there being any reserve in the Signal Corps of any kind. We are traveling too close to the wind.

Senator LENROOT. Then, this is not a matter for you to worry about, but for the Militia Bureau.

Colonel GRIFFIN. Yes, sir. I am merely presenting it with the thought I do not want them to think we are going to give it to them, and it necessitates a change in the statute. Now, Colonel Seoane, of the Supply Division and also the executive in the office of the Chief Signal Officer, has personal intimate knowledge of the supply proposition in the office, and I assume that you gentlemen might want to discuss with him the question of supply as coming in some of the other items under discussion covered by that \$95,000 you speak of.

Senator WADSWORTH. Is it something that ought to be emphasized, Colonel, do you think? It is now 5.30.

Colonel SEOANE. No, sir; it is nothing that needs to be emphasized. Everything has been presented.

Senator WADSWORTH. I thought we had had a rather liberal discussion, and I am glad we had it, too, but I think you have painted the picture.

Thank you very much, Colonel.

(Whereupon the committee recessed until Tuesday, April 11, 1922, at 10.30 o'clock a. m.)

WAR DEPARTMENT APPROPRIATION BILL, 1923.

TUESDAY, APRIL 11, 1922.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10.30 o'clock a. m.

Present: Senators Wadsworth (chairman), Sutherland, Spencer, Lenroot, Hitchcock, and Harris.

Major BROWNE. Colonel Sherrill is here to speak about public buildings and grounds. The item begins on page 111.

STATEMENT OF LIEUT. COL. CLARENCE O. SHERRILL, UNITED STATES ARMY, IN CHARGE OF PUBLIC BUILDINGS AND GROUNDS.

LINCOLN MEMORIAL.

Colonel SHERRILL. Mr. Chairman, there are two items—one on line 16, page 112 of the estimate, and continuing on down through, the Lincoln Memorial. There is one item for heat, light, miscellaneous labor, and supplies, for which an estimate of \$5,000 was submitted, and \$3,910 was allowed in the House; I think that will be adequate, because we contemplate reducing the amount of heat we use in the memorial.

Senator SPENCER. What page is that on?

Colonel SHERRILL. Page 112. There is also a small reduction of \$50 in the next item, extra services of employees, which will also be adequate, on account of the decrease in the amount of heating that we will do at the memorial.

Senator WADSWORTH. Then the total of \$11,000 is sufficient?

Colonel SHERRILL. That is sufficient; yes, sir.

REFLECTING POOL IN WEST POTOMAC PARK.

The next item is on page 112, line 22:

For completing the construction of a reflecting pool in West Potomac Park, \$50,000.

The estimate, which was \$100,000, was cut down to \$50,000; and the estimate also included a statement that the funds would be immediately available. I should like to request that that be restored, because there is a great deal of work going on practically under one continu-

ous contract, and if we have to stop to wait for the next year we shall have to make a break in the work, which would be very inadvisable.

Senator SPENCER. Have you exhausted this year's appropriation?

Colonel SHERRILL. It is exhausted under the contracts now let.

Senator WADSWORTH. What is the nature of the work still to be done there, Colonel?

Colonel SHERRILL. I have here a statement showing in detail the work to be done. In general, it consists of the waterproofing of the small pool and a number of other items. In order to make it clear if the committee will allow me, I will show you this drawing.

Senator WADSWORTH. I should like to see it.

Colonel SHERRILL (producing map). I might say that in putting down the foundations of the coping and terrace walls to rock, there is, as you recall, a small portion of that outside of the circle; that part is very light and is in an entirely independent structure, so that it was not thought necessary to carry it down to rock. There is no indication of any cracking, or any uneven settlement; but that part is on a spread foundation, so that some day in the distant future it may have to be underpinned. Therefore I should like to show that now, so that the whole situation will be known.

When the memorial was built, that portion [indicating on map] which is the memorial proper, was put down to rock. The coping, which is this [indicating], and the terrace, which is this [indicating], were not put down to rock, because they were relatively light structures; but there was a very large fill placed in here [indicating]. All of this has now been put down to rock, but this little part here, which is across the road, those steps down there, have not been put down to rock, and we do not feel that they should be carried down to rock. It probably will never have to be, but there is that possibility. The coping wall of this long pool, which we have just finished during this year—that is over a mile in length, 5,000 and some feet in length—is placed on piles to carry the concrete superstructure and the stone coping of granite, which is going around there now; the contract is let for the granite, and they are now building it. They are carrying it along here. On account of the temporary buildings that were placed over here, it was found impossible to carry out the original plan, which involved these wings.

Senator SPENCER. That has been only temporarily suspended?

Colonel SHERRILL. On account of the fact that we felt that those buildings might stay there 20 or 30 years—they are good buildings, and it would be hard to get them down—we thought it would be better to carry this along and make a finished job on both sides, and then, at very little expense, if the time ever came that they wanted to do that, they could cut that out and complete it as planned; but the present plan as we have it now makes a complete job of this absolutely as it stands, and most of the work that is contemplated in this appropriation is indicated here in yellow. With the \$50,000 we would finish waterproofing that small pool. The money we have will waterproof this large pool, and will put in the coping, but it will not waterproof that [indicating small pool on map]. The money that we hope to get now will waterproof that, and with it we hope also to build these walks and this roadway in here—all these walks here, which are very wide. You see, that is quite a wide walk, and the

length of this is so great that it makes a pretty big job; but by allowing \$50,000 we could probably build that inside row of walks and do the waterproofing and probably the grading, but we could not make a finished job. I feel, therefore, that since if you do not do it now, later, when we do get the money, we will have to go ahead and tear it all up again. It would be very much better if we could have the money now to make a complete job of this, which has always been considered an essential part of the memorial—that is, right out to that second row of trees. These are all trees here.

Senator SPENCER. How much do you need for that?

Colonel SHERRILL. The House allowed \$50,000, and we should like to have, all told, \$100,000.

Senator SPENCER. That is the estimate?

Colonel SHERRILL. Yes, sir. I have here a statement of the amount of walks and other things to be constructed, and there are some pretty large items, simply because that is a big structure. The walks adjacent to the pool amount to 16,144 square yards, which at \$2.50 a yard amounts alone to \$40,000.

Senator WADSWORTH. What are the walks made of?

Colonel SHERRILL. These walks are concrete, just like the ones we have recently finished around the memorial here. The Fine Arts Commission were very anxious to have what they call the scrubbed surface walks, similar to the wall at Meridian Hill; but it costs more than twice as much, and I did not feel justified in estimating that. The scrubbed concrete costs about \$4.40, instead of about \$2.50 a square yard. We shall be able to do most of the grading before the unveiling if the funds are made available right now.

Senator SPENCER. What is the appearance of the walk that the Fine Arts Commission wanted you to put in? How does it look at the top?

Colonel SHERRILL. It shows the pebbles. It is a concrete walk, which we call a scrubbed walk, and it shows the pebbles, and makes what they consider a very artistic effect; but the reason why I thought it would be quite satisfactory to put in a plain walk is that at a distance of a very few feet you can not tell the difference, and it costs almost twice as much, so I do not think it is justified. I do feel, however, that it is important to give the money for this whole thing, so that we can finish it up. I will try to get everything done by the 30th of May, if you will give us the money.

Senator SPENCER. Will you have water in there by the 30th of May?

Colonel SHERRILL. Yes, sir; we will have water in there for the unveiling, but of course we may not be able to get quite all the waterproofing done, although I think we will. It is going on very well, and the stone for the coping is coming rapidly, and of course, they waterproof right behind the stone. They keep right up with it, so we are likely to get it done.

Senator WADSWORTH. What is the material with which you waterproof the bottom of the pool?

Colonel SHERRILL. That is an asphalt. We put in a rolled base of 6 inches of cinders, and then on that we put in several layers of asphalt and felt. We are making a very thorough waterproofing job of it, because waterproofing a structure of this kind is rather an un-

usual job, and we have had the very best advice we could get from the Bureau of Standards and other experts on waterproofing to make it a success. We do not want to have any failure after we get through. The intention is to use the city water, and the expectation is that it will make a very beautiful reflecting surface, which of course would add a great deal to the attractiveness of the unveiling on the 30th of May, if we get it finished, or at least get enough finished down here so that with the water in the pool it will have the appearance of being finished.

As I say, we could get along with \$50,000 now, but it would simply mean that to complete the small ornamental fountains that go here, and the additional walks, and the grading, and planting of trees, we would have to keep that in a constantly torn-up condition. At least, we would have to tear it up later. We could not finish it now.

Senator WADSWORTH. You think \$100,000 will finish the whole job, do you?

MEMORIAL BRIDGE.

Colonel SHERRILL. That will absolutely finish it. What we call the Lincoln Memorial will be absolutely finished. There is a space between the Lincoln Memorial and the river, that ungraded portion, that we can not undertake to finish until we know where the memorial bridge is going to be; but my present impression is, after studying it, that that proposed bridge, instead of being placed where the old 1901 commission indicated, right here—you see, it gives a sort of an askew appearance to the whole Mall—instead of being placed there, it is my impression that it may have to start out in an extension of New York Avenue and go across that high land perpendicularly across a much shorter portion of the river. Then it will make an approach straightaway to Washington from the battle field of Bull Run, and instead of leading right into the Lee House it will have a suitable outlet, but the main approach will be a straight approach to Washington, which is so much needed. As soon as that is determined by the Memorial Bridge Commission, of which the president is chairman, we can at once go ahead and finish the grading there without any interference.

Senator SPENCER. Where is the present bridge—how far up?

Colonel SHERRILL. The present bridge, I should say, is nearly 2 miles away up here at Georgetown, and it seems to me upon examination that there are several reasons why this bridge ought to be built on an extension of New York Avenue. One is that you would have an unobstructed entrance. You always would have an obstructed entrance here, and people would have to turn aside and go all the way around this, and it seems to me it would be an unsatisfactory procedure to have to go around the Lincoln Memorial every time you wanted to go across the bridge.

The next thing is that you would never be able to get a view of that bridge except from some side position. You could not get a view from the entrance.

The third is that you would probably have to have a draw in the bridge, because it lies very close to the surface of the river, while up here you have a natural elevation of some 60 feet, which would carry the bridge over in good style.

If this bridge should be authorized, we could open this area to filling and get all the fill in there that the Government wants without any cost, so that all of this part would be a very gentle mound without cost. Then when we did get ready to build the bridge we could build that short part to the island, and it could be made a beautiful independent structure, too.

Senator SPENCER. It never was thought, was it, to continue that bridge right across there? [Indicating on map.] That is where I should say this bridge should be.

Colonel SHERRILL. Mr. Cass Gilbert, I think it was, one of the prominent architects, mentioned that, but the trouble with that is that while that would be the artistic thing it would be unsound from a practical point of view because of that oblique crossing of the river, which would make it cost a good deal more, and all of your piers would be askew piers, and it would be very unsatisfactory, so that from a practical point of view in every way this is the place for it. When we put it here it would be far enough from the Lincoln Memorial to allow a magnificent structure here without dwarfing that, and vice versa, and also to allow a beautiful view of the Lincoln Memorial.

Senator HARRIS. It would save the congestion there?

Colonel SHERRILL. Yes, sir.

Senator SPENCER. My judgment is the other way—from an artistic point of view.

Colonel SHERRILL. You like this? [Indicating on map.]

Senator SPENCER. Yes.

Colonel SHERRILL. It really would be a beautiful thing, except we always consider that a thing can not be architecturally very sound unless it is sound from a utilitarian point of view. You see it is a great deal longer span.

Senator WADSWORTH. It is a great pity that the Navy Building and the Munitions Building were put there.

Colonel SHERRILL. They could have bought the ground for those buildings right across the street here; but they are good buildings, and I think they probably will be there for 20 or 30 years.

Senator WADSWORTH. Of course, they really encroach upon that vista.

Colonel SHERRILL. There is no doubt about that.

Senator HITCHCOCK. For utilitarian purposes there is not much occasion for that bridge, is there? Are there not enough bridges there already?

Colonel SHERRILL. No, sir. At the Arlington ceremony it was indicated that there was not by any means enough bridge capacity going over there.

Senator HITCHCOCK. Oh, for a great emergency, that is true; but that was largely due to mismanagement, was it not?

Colonel SHERRILL. No, sir; I do not think so. It was just a bigger crowd than could get through the bridges.

Senator SPENCER. If that new bridge had been completed that delay would not have occurred, would it?

Colonel SHERRILL. That new bridge and the bridge near it I think both together would have answered the requirements, although that road over at Georgetown gets tremendously congested. It has street cars and everything else on it.

Senator HITCHCOCK. On that occasion the traffic was going in two directions over that bridge, was it not, and got stuck?

Colonel SHERRILL. There was poor management, of course.

Senator HITCHCOCK. If it had been all moving one way the delay would not have occurred?

Colonel SHERRILL. If the roads had been thoroughly policed they probably would have gotten through; but, as a practical thing, we have to have a straight, fine approach into the city from Virginia, and this would lead right down to the battle field of Bull Run, practically straight all the way through.

That is the only item I have to submit, Mr. Chairman.

Major BROWNE. The next item is the Coast Artillery item, beginning on page 77.

STATEMENT OF MAJ. GEN. FRANK W. COE, UNITED STATES ARMY, CHIEF OF COAST ARTILLERY.

SEACOAST DEFENSES, UNITED STATES.

Senator WADSWORTH. General Coe, you may proceed in your own way.

FIRE CONTROL IN THE UNITED STATES.

General COE. Mr. Chairman, on page 78, line 9. The estimate for fire control in the United States was \$90,000. The present bill carries \$60,000. I should like to request the restoration of the amount of \$90,000. It was composed of three items of \$30,000 each—\$30,000 for continuing the fire control for the four 16-inch howitzers which are being mounted at the entrance to Chesapeake Bay; \$30,000 for beginning the fire-control system for the 16-inch guns which will be mounted next year at Fort Tilden, Rockaway Beach, the first 16-inch guns which will be mounted in this country; and \$30,000 for continuing experimental work in subaqueous sound ranging, which is the only promising means we have of handling extremely long ranges—that is, beyond sight or the tracking of ships in fog or at night.

SUBAQUEOUS SOUND RANGING.

Senator HITCHCOCK. How is that work of subaqueous sound ranging done? Can you tell us, in a word, what that means?

General COE. We are working with two systems, both of which give very good results. One is called the Bull-Tucker system, which gets the blow that is delivered by a shell striking on the water and locates it by means of a base line, the sound coming from two different directions. The other is a continuous sound system, by which we are enabled to track a vessel from the sounds emanating from its hull, carried through the water to hydrophones which are located underneath the water. The Bull-Tucker system is the same that we used for sound ranging in the air in France. The other is an entirely new development.

Senator WADSWORTH. Apparently the House appropriation will prevent your carrying on the research work.

General COE. It would prevent us from doing one of the three things.

Senator LENROOT. Which would you stop?

FIRE-CONTROL WORK AT NEW YORK.

General COE. Senator, that is hard to say. I think I would stop the fire-control work at New York, or not start that work until a further appropriation was made, because we feel that for one more year at least we ought to carry on this experimental work. The developments there have been looked over by the Bureau of Standards people, a representative from which was up there the other day, and he wrote me a letter expressing congratulation upon the efficiency with which that work was being carried forward and the results which were being obtained in all directions, and I should hate to see that stopped next year.

Senator HITCHCOCK. How much have you spent on that during the current year?

General COE. \$27,500.

Senator HITCHCOCK. How was it expended?

General COE. For material. We have contracts with the General Electric Co. for the hydrophones and for the various complicated apparatus which goes to make it a practical thing. It is a very complicated apparatus, although the actual use of it is not very complicated.

Senator HITCHCOCK. What progress was made in it this year?

General COE. We have obtained the results which I have just mentioned, Senator Hitchcock; that is, we were able actually to track a vessel from the sounds emanating from her hull, but we are not satisfied. We have not perfected the apparatus yet.

Senator HITCHCOCK. So for this \$27,500 expended during the current year you have made really substantial progress?

General COE. Yes, sir; we feel that we have made very substantial progress, and I should hate to see it stopped at this time, because, as I say, it is the only means we see now that will give a possibility of tracking a vessel beyond the range of sight. We have guns now which range up to 50,000 yards. It is very seldom that you can see a vessel over 25,000 yards away. Sometimes, under favorable conditions, you can see her 30,000 yards away, but that is about the limit of sight; and we have no means of locating the target so that we can fire on it beyond that range at the present time.

USE OF AIRPLANES IN FIRE-CONTROL WORK.

Senator WADSWORTH. Can you locate the target with the aid of airplanes?

General COE. No, Senator Wadsworth; we can not locate the target by airplanes in order to fire upon it. Of course, if we can locate it in any way we can correct and adjust the fire by means of airplanes, and do that all the time when the target is within sight. We do that regularly in our target practice, and the Air Service cooperates with us in a fine way in that respect. Almost all of our target practice at the big fortifications is held with air observation.

Senator LENROOT. Assuming that you are able to perfect this system so as definitely to determine the location, could you get any substantial percentage of hits at that distance?

General COE. Yes, sir; we will get a good percentage of hits if we can determine the exact location. That, however, is necessary.

Senator LENROOT. You would do that even at that distance of the extreme range of a gun?

General COE. Yes, sir; we expect to get hits at that range.

Senator SPENCER. The extreme range is how much?

General COE. Fifty thousand yards.

Senator WADSWORTH. Is that the 16-inch rifle?

General COE. Sixteen inch, 50 caliber.

Senator SPENCER. Can you get any appreciable percentage of hits at 30 miles?

General COE. Yes, sir; I think so. The accuracy of the 16-inch guns at those extreme ranges, of course, has not been determined, because they never have been fired. We are only beginning to fire at those ranges now. At Aberdeen they are now firing the first 16-inch gun which has been completed by the Ordnance Department, and what our probable error will be at those ranges we can only estimate, but we expect to get a reasonable number of hits.

LIFE OF PRESENT 16-INCH GUNS.

Senator HITCHCOCK. What number of shots can such a gun fire during its life?

General COE. With the Navy gun and projectile, they figure 250 rounds. Our allowance of accuracy life has been called 100 rounds, but I am sure it is very much over that. I give you those as the two extremes.

Senator LENROOT. What makes the difference in the two figures between the Army and the Navy?

General COE. Just a matter of opinion. Of course the accuracy life is not a definite thing. The gun gradually reaches that point. You can never say that the gun has actually reached it, because even if it does get a little inaccurate it still has a certain accuracy, and it is a question of what degree of inaccuracy is going to determine its life.

Senator LENROOT. But how does it come that the Navy and the Army are so far apart in their estimates?

General COE. The Navy uses a slightly lighter projectile, and those conditions make some difference.

Senator LENROOT. I see.

General COE. But it is really a matter of arbitrary opinion. Before this time we had set the life at 100 rounds, although we now feel sure that the accuracy at 150 rounds or 200 rounds will still be sufficient to warrant our use of the gun.

Senator HITCHCOCK. Is it the wear inside the rifling or in the breech that makes the trouble?

General COE. It is the wear all the way through. Of course, the greater part of the erosion comes at the beginning of the rifling, near the powder chamber; but that does not affect the accuracy so much as the small amount of erosion that takes place along toward the muzzle.

Senator SPENCER. General, after you have fired 250 rounds, if that is the maximum, is the gun relined?

General COE. It is relined; yes, sir.

Senator SPENCER. Can that be done where the gun is?

General COE. No, sir; it has to be sent to the arsenal. I presume the committee is acquainted with the situation regarding 16-inch guns.

Senator WADSWORTH. We have all that. The Ordnance people gave us those figures, and so did the Engineers.

Senator LENROOT. With reference to fire control, General, what is the total cost of fire control for each 16-inch gun?

General COE. For a battery of two 16-inch guns we estimate \$120,000 as a rough figure. Of course that figure varies a great deal, depending upon the location and what we have to do. In some places it is an easy problem, and in others it is a very difficult problem.

Senator LENROOT. But you figure about \$60,000 per gun?

General COE. Yes, sir.

Senator WADSWORTH. You purchase the fire-control apparatus, do you?

General COE. Yes, sir.

Senator WADSWORTH. The Engineers purchase the electrical machinery?

General COE. Yes, sir. Of course, this money that is carried under the Chief of Coast Artillery is allotted by him to the Engineers, the Signal Corps, and the Ordnance for various material or work that is done in the fire-control system.

Senator HITCHCOCK. Then this is just for continuing work that is under way now?

General COE. \$30,000 is for continuing work at Fort Story, at the entrance to Chesapeake Bay. We have started that project down there. Thirty thousand dollars for beginning work at Fort Tilden, N. Y., on the 16-inch battery that is going in there, and \$30,000 for experimental work.

Senator HITCHCOCK. In each case the total cost will be \$125,000 for each battery?

General COE. Approximately; yes, sir.

Senator LENROOT. That fire control must be provided for each battery?

General COE. To use the battery at all; yes, sir.

Senator HARRIS. General Coe, as I understand, you can not reduce this appropriation on any one of the three things. You would simply have to cut out one of them?

General COE. It might be done; that is, we could do less work at Chesapeake Bay and New York, and save \$20,000 in each case; but we feel that those guns are being installed, and we feel that we ought to have the work go ahead pretty fast, so that they can be used. They can not be fired until that is done.

Senator HITCHCOCK. You say the big guns can not be used at all without the fire control?

General COE. No, sir; absolutely not.

Senator HITCHCOCK. That is, you can not get any accuracy with them?

General COE. You can not get any accuracy. Of course, they can be fired right out to the open sea; but, I mean, to direct their fire upon a target the fire control is absolutely necessary.

Senator HITCHCOCK. You would not get any accuracy with them on the target?

General COE. No, sir.

SEACOAST DEFENSES, INSULAR POSSESSIONS—FIRE CONTROL, PHILIPPINE ISLANDS.

The next item is page 79, line 11, fire control, Philippine Islands. \$12,000. The estimate was \$36,000. I would recommend that that item be eliminated from the act. Under the treaty, in my opinion, we can not do any work of that kind over there.

Senator SPENCER. This is unusual. Shall we strike it out?

General COE. Yes, sir.

Senator HITCHCOCK. What is that—in the Philippine Islands?

General COE. In the Philippine Islands; yes, sir; not in the Hawaiian Islands.

SEACOAST DEFENSE, PANAMA CANAL.

On page 79, line 15, there was an estimate for \$40,000 submitted for fire control in the Panama Canal Zone. It is pasted on this bill on the right-hand side. It is very essential that some appropriation, at least, should be made for that work. That is for the fire control for the antiaircraft armament that is now installed; at least, about 36 guns of that armament are installed in the Canal Zone, and this item is for the fire control for that armament at the Pacific entrance to the canal. The antiaircraft fire control down in the Zone is a very hard problem to solve, and we have cut that estimate from the original estimate of \$350,000, which came in, but which I said I would not stand for at all, and that they must revise their plans very materially. That has now been done, and the plans contemplate the expenditure of \$40,000 for the Pacific end of the canal.

Senator HITCHCOCK. Why is this cost of experimenting and development put in here, when you have that already provided for in the previous appropriation?

General COE. It was simply uniform language for the three items, Senator Hitchcock. The wording of the similar items for the United States and the insular possessions reads that way and we simply made it the same.

Senator HITCHCOCK. You would not, as a matter of fact, experiment in both places?

General COE. No, sir; we do not expect to use any of that money at all for experimental purposes.

Senator WADSWORTH. Are you referring now to the \$25,000 item?

General COE. The \$40,000 item.

Senator HARRIS. You feel that that \$40,000 is absolutely necessary, do you?

General COE. Yes, sir.

RADIODYNAMIC TORPEDOES.

On page 104, lines 15 and 16, there is a clause reading:

Radiodynamic torpedoes, \$720,000.

That is an appropriation which dates back to 1916, and was made for the purpose of acquiring the rights of John Hays Hammond, jr.,

to certain of his inventions, providing such action was recommended by a joint Army and Navy board. We started in the development three years ago, but on account of the developments in bombing from airplanes I recommended to the Secretary of War that we stop the radiodynamic torpedo development entirely, which was done last summer. There was an additional appropriation of \$417,000 which we were spending, and we saved about \$200,000 of that, which will revert to the Treasury. This \$720,000, however, is contingent upon the final report of the joint board, and that report has not been made. Furthermore, the Navy has also been working with the control of their Navy torpedo with Mr. Hammond, and if their experiments are successful it is possible the joint board will recommend the award, in which case it should be paid. However, it is expected that all those experiments will be completed in July, and this board will have its final meeting and arrive at a final conclusion in the matter, when it will be settled one way or the other. I do not undertake to predict which way it will be settled, but I think the appropriation should remain until that is finished.

Senator SPENCER. Is this the amount of the award?

General COE. \$720,000 is the amount to be awarded in case of a favorable conclusion.

Senator LENROOT. If it is awarded at all?

General COE. Yes.

Senator WADSWORTH. And it has been appropriated?

General COE. It has been appropriated for several years.

Senator WADSWORTH. The House includes it in this large number of items which are to be returned to the Treasury?

General COE. Yes, sir. The House, of course, was acquainted with the fact that we had stopped work on the torpedo, and I think that probably was the reason that it thought the thing was all over; but as a matter of fact the Navy are also working on it.

Senator WADSWORTH. I have here a letter from Mr. Roosevelt, signed as Acting Secretary of the Navy on March 23, which ought to be printed in the record. In brief, it urges very earnestly that this sum be not turned into the Treasury. I have also a letter from Mr. John Hays Hammond himself, under date of March 24, inclosing a letter which he wrote to the Secretary of War under date of August 12, 1921, giving a history of this whole transaction, and a description of the development up to date, and the viewpoint of himself and his associates who have worked a long time at it.

(The letters above referred to are as follows:)

NAVY DEPARTMENT.
Washington, March 23, 1922.

MY DEAR SENATOR: It has been brought to my attention that the military appropriation bill, as presented on the floor of the House, provides for the return to the Treasury of the unexpended balance of an appropriation made for the purpose of acquiring the rights to certain patents of Mr. John Hays Hammond, Jr.

Without going into the details, with which you are familiar, it appears that the War Department has stopped all work in connection with this development because it was felt that the status had been changed due to the advent of bombing planes, which would take the place of radio-controlled torpedoes in coast defense. In the meantime the Navy Department has been working with this invention, and expects to be able to control a torpedo by radio in the near future, and will continue active work along this line so soon as weather conditions in the vicinity of Newport permit.

A satisfactory control of submerged torpedo will comply with the law making appropriation, this being a requirement before the money appropriated may be paid. A further requirement is that a board of Army and naval officers will report that the inventions are worth the amount of money appropriated.

Originally, the chief objection of the Navy Department to the suggested use of a radio-controlled torpedo was the matter of "interference," which at the time the idea was presented would enable the enemy to prevent proper control. However, Mr. Hammond has overcome this difficulty through devising a method the use of which eliminates this interference. Under the agreement with Mr. Hammond licenses under all of his radio patents, including the noninterference one, are granted to the Government. These licenses are of considerable value both for use in time of peace as well as in time of war, and if extended to include the radio telephone, which is possible, even probable, their value to the Government will be greater. This "noninterference" system has now become the chief item of interest to the Navy Department, and since it is included in the agreement with Mr. Hammond the Navy Department is much interested in continuing the appropriation.

* * * * *

Sincerely yours,

THEODORE ROOSEVELT,
Acting Secretary of the Navy.

You can readily see just how important this "noninterference" system might be.

HON. J. W. WADSWORTH, JR.,
United States Senate, Washington, D. C.

NEW YORK, March 24, 1922.

HON. JAMES W. WADSWORTH,
Chairman Senate Committee on Military Affairs,
Washington, D. C.

MY DEAR SENATOR WADSWORTH: I understand that there is an item in the present Army bill which will shortly come before your committee which relates to the return to the Treasury of the sum of \$720,000 for radiodynamic torpedoes. This is a matter of such vital importance to me and my company that I am taking the liberty of calling the same to your attention.

Inclosed herewith you will please find a copy of my letter to the honorable Secretary of War, dated August 12, 1921, which I believe is self-explanatory. Since the discontinuance of the work by the Coast Artillery the Navy Department has shown a serious interest in the demonstration which I am now making. The return of this appropriation to the Treasury, as contemplated in the present Army bill, would be an injustice to me and my company and a repudiation by the United States of its promises and obligations. I therefore respectfully urge that you give this subject your serious consideration, and I will be glad to furnish you whatever additional information you may desire.

Very respectfully,

JOHN HAYS HAMMOND, JR.

AUGUST 12, 1921.

THE SECRETARY OF WAR,
Washington, D. C.

DEAR SIR: I understand there is now in your hands a recommendation from the Chief of Coast Artillery to discontinue further development of the radiodynamic control unit authorized by the act of July 6, 1916, as amended by the act of March 3, 1919. This is a matter of extreme importance to me, and pursuant to the request of the Chief of Staff I respectfully submit to you the following:

In 1912 I asked Gen. E. M. Weaver, then Chief of Coast Artillery, whether his department was interested in a system, which I had discovered, whereby a water-borne carrier of explosives might be controlled from a distance through wireless energy. I was assured such a development would be of the greatest importance for the purposes of coast defense.

Thereafter General Weaver and his technical associates witnessed a demonstration and made an official recommendation to the Board of Ordnance and Fortifications to develop my system for the purpose of making installations thereof at certain of the coast defenses. Research and development from this

time on and along this line were conducted under my direction with the close association of the Coast Artillery Corps, who sent personnel and material to assist me at my Gloucester laboratory.

In 1915, General Weaver and the Board of Ordnance and Fortifications being fully satisfied with the development to date, recommended to the Secretary of War, Mr. Lindley M. Garrison, the acceptance of a proposition which, upon request, I submitted to the board on February 6, 1915, and providing for the use of my patents by the Government. The Secretary immediately wrote the chairman of the Senate Appropriations Committee recommending an appropriation for this purpose, but Congress adjourned before anything could be done.

In 1916 the matter was again brought before the Board of Ordnance and Fortifications and was recommended by the Secretary of War to Congress. During the interim it was necessary for me to maintain my laboratory staff, since only through the cooperation of my technical staff, having special training, would it be possible for me to realize the final successful construction of the radiodynamic unit.

Exhaustive hearings were held before the House Committee on Appropriations, as a result of which I agreed to modify my original proposition so that I would receive \$750,000 for my entire patent rights. The act of July 6, 1916, was passed, authorizing the purchase of my rights for \$750,000, after a joint board of three Army and three Navy men appointed by the President had witnessed the demonstration of my inventions. Thirty thousand dollars was appropriated for the purposes of this demonstration.

Up to 1916 my relations were entirely with the Coast Artillery. After the appointment of a joint board it was suggested to me by Navy representatives that in order to satisfy the Navy members of the board I would have to demonstrate a control of my system from the air. I pointed out that the appropriation of \$30,000 would be insufficient for this purpose. At my request the board gave me a statement prescribing the type of demonstration I should make. Such prescribed demonstration was given by me in 1918 at a cost of \$90,000 of my own money over and above the \$30,000 allotted by Congress.

Such demonstration, according to the records of the joint board, was eminently successful. The joint board, however, withheld its favorable report, stating the demonstration of the application of my control of surface carriers was not sufficient and that they desired a demonstration of control of completely submerged carriers. Apparently the board had forgotten that they had definitely informed me as to the type of demonstration they required, and were very much surprised when I showed them that what I had done was exactly what they had requested me in writing to do.

Needless to say, I was very disappointed in the position taken by the board. At that time the United States was actively engaged in the World War. Official inquiries were made by the British Admiralty relative to my work and the possibilities of using it. My system, which has lately been applied successfully to the control of the battleship *Tora*, existed in its entirety in 1917 and 1918. It then could have been most effectively applied in blocking operations, which were being actively carried on, on the coast of Belgium. Under such circumstances it seemed to me incredible that the board could lack the vision to apply my work along the lines which would necessarily have been of value to the Allies.

In a very much distressed state of mind, I later called upon the Secretary of War, Mr. Newton D. Baker, and told him that I felt I had been treated most unjustly and that I had been put to a large financial loss and the loss of valuable time in the prosecution of my work. I told Secretary Baker that further expense of this development should be borne entirely by the Government, and that I would be able to develop my system so that I could make the new demonstrations required by the board.

The letter of the Secretary of War, dated January 28, 1919, to the Appropriations Committee defines the situation as it existed at that time. Further hearings were held before the House committee, and the act of March 3, 1919, was passed amending the previous act of 1916, so that \$417,000 was made available for expenditure under the direction of the Secretary of War for further development, demonstration, etc.

I was given to understand that as soon as it was definitely known that certain difficulties relative to the construction of the radiodynamic unit were con-

skidered surmountable by the Coast Artillery Corps, expenditures would be made from the fund and that the expenses which I was meanwhile incurring for the prosecution of this work by my own engineering staff would be reimbursed me. This amounted to about \$29,000 a year, and in order that their salaries might be eventually reimbursed me by the Government, the War Department caused my staff to be enrolled in the civil service by the act of the Civil Service Commission of June 4, 1919.

Colonel Abernethy now states that there are no insurmountable technical difficulties in the construction of this Coast Artillery unit. However, the Coast Artillery contemplates discontinuing this development, their decision being based upon the assumption, that bombing aircraft will supersede the tactical utility of the radiodynamic torpedo. I have discussed this opinion in a critique which I will submit in a separate memorandum to you.

I desire to call to your attention the fact that the Joint Board of Army and Navy officers are empowered to recommend the purchase of my patents after witnessing a satisfactory demonstration of my system and that General Coe states that even in the event of tactical success of the radiodynamic developments of the Coast Artillery, the joint board would decide adversely thereto. General Coe states this with assurance as his vote and that of his subordinates are deciding votes.

In view of the foregoing and in justice to me I make two requests of the War Department:

1. Up to 1916 I had expended over \$300,000 for the development of my system, mainly for the purpose of adapting it for the use of the Coast Artillery. Since 1916 I have expended over \$160,000 in carrying out my agreement, which was accepted by the Government by the appropriation act of 1916. These figures are readily sustained by an audit of my books, which I should be glad to have you make.

I respectfully submit that steps should now be taken leading to the reimbursement of myself and my company for moneys expended and losses sustained since 1916 by reason of my relations with the Government, and because of changes in the policy of the Coast Artillery, and circumstances not within my control.

2. The Navy field of development of my invention is still active, for which the balance of the appropriation should be available under this act. I refer to the development of my system in connection with the control of completely submerged carriers, which for some time has been and still is being prosecuted by the Board of Ordnance of the United States Navy, and which the Navy Department contends is of the type of "torpedo" covered by the act. Mr. Baker, in his letter to Congress advocating the \$417,000 appropriation, stated that it was believed the interest of the United States would be subserved if funds were made available so that there may be developed direct radio control or radio-sonic control of the Navy torpedo, or its equivalent, and of a carrier submerged except for an air-intake pipe.

The Coast Artillery up to this late date have been thoroughly satisfied with the practicability of my system and have been generous in their commendation and have recommended to the Government to acquire my patents. But they now doubt its utility because of the success of the bombing operations. On the other hand, the Navy Department, originally in opposition to my system, are now anxious to proceed with its development in connection with its own type of torpedo. I therefore respectfully suggest that the available balance of the appropriation be transferred to the Secretary of the Navy for use in the development of the torpedo unit in which they are interested. This will enable me to give a demonstration before the joint board with more than reasonable hope of a favorable verdict.

All the foregoing statements, I believe, can be substantiated by your files and records. I have prepared, however, for your convenience a very detailed history of my relations with the Government, which I submit herewith.

Abandonment at this time of the project as a whole would be not only most unfair to me and my associates, but in my opinion unquestionably detrimental to the best interests of this country.

I am,

Yours very respectfully,

JOHN HAYS HAMMOND, Jr.

Senator LENROOT. Are we under obligations to go ahead and complete that investigation and report?

General COE. Yes, sir.

Senator LENROOT. In any event?

General COE. Yes, sir.

Senator LENROOT. So that it will be a matter of either leaving it, or reappropriating it in case the board makes an award?

General COE. Yes, sir.

Senator HITCHCOCK. And you say the decision is to be made in July, General?

General COE. We expect to have the final meeting of the joint board in July or soon thereafter. The Navy expect to complete their experiments in July, and a meeting of the board will probably take place very shortly after those experiments are completed.

Senator HITCHCOCK. It is still problematical whether it has succeeded or not or whether it has complied with the requirements?

General COE. Yes, sir; of course, even if completely successful control of a naval torpedo were accomplished by Mr. Hammond, the award will not be made unless, after that, this joint board recommends that the United States acquire those rights. The award is not contingent upon the successful control of the torpedo alone, but upon the recommendation of the joint Army and Navy board, which has been in existence for many years. General Wood was the chairman of it for a long time.

Senator HITCHCOCK. In the event that the decision is favorable to the Hammond device, is this the only amount appropriated or does the Navy appropriate some amount?

General COE. This is the only amount.

Senator HITCHCOCK. It comes in the Army bill for the Navy as well?

General COE. That is for the rights. I think the Navy are expending certain funds in their experimental work—I know they are—and they probably have purchased material, etc., from Mr. Hammond.

Senator WADSWORTH. It is fair to say that Mr. Hammond has spent a great deal himself, too.

General COE. Yes; I know that he has spent a great deal of money.

WARRANT OFFICERS, ARMY MINE PLANTER SERVICE.

Referring to page 17, line 24, I should like to insert in the record an extract from a letter from the Secretary of War to the chairman of the House Military Affairs Committee, and explain it briefly. (The letter referred to is as follows:)

WAR DEPARTMENT,
Washington, March 22, 1922.

Hon. JULIUS KAHN,

Chairman Committee on Military Affairs,

House of Representatives, Washington, D. C.

MY DEAR CONGRESSMAN: In further report on H. R. 10871, the proposed Army appropriation act for the fiscal year 1923, the studies made by the various interested services mentioned in the department's letter of March 15, 1922, have been received by the department, and as a result of these studies the following additional objectionable features in the bill are communicated to you for such use as you care to make of them.

The proviso on lines 24 and 25, page 17, which reads: "Provided, That the sum herein appropriated for the pay of warrant officers shall not be used for pay of more than 40 officers of the Mine Planter Service," will reduce the number of warrant officers in the Mine Planter Service below the actual number required

to operate the mine planters now in the service, or those required to operate the 10 mine planters required for the fiscal year 1923. The number of warrant officers now in the Mine Planter Service is 79, all of which were legally appointed under the act approved July 9, 1918, reading as follows:

"Army Mine Planter Service: That hereafter there shall be in the Coast Artillery Corps of the Regular Army a service to be known as the Army Mine Planter Service, which will consist, for each mine planter in the United States, of one master, one first mate, one second mate, one chief engineer, and one assistant engineer, who should be warrant officers, appointed by and holding their offices at the discretion of the Secretary of War * * * as may be necessary to constitute the force provided by this chapter."

A minimum of 50 mine planter warrant officers will be required to operate the 10 mine planters required for 1923. In justice to the 29 which will become surplus, they should be continued in the service operating quartermaster harbor boats until they are absorbed.

The proviso commencing on line 2, page 18, reading, "*Provided further*, That no vacancy in the grade of warrant officer shall be filled until the number in such grade is reduced to 600, and thereafter the number shall not be increased above 600," makes it doubtful whether the warrant officers of the Mine Planter Service are included in the 600 warrant officers mentioned therein.

* * *
Sincerely yours,

JOHN W. WEEKS, *Secretary of War.*

General COE. During the war we constructed nine new mine planters, and they were completed shortly after the war and placed in commission under the general authority of the law which provided five warrant officers for each of those planters. With the reduction of the Army, and also for the purpose of economy in the administration of the mine-planting service, it became necessary to place 10 of those mine planters out of commission. The result was that we had 19 in commission, and we placed 9 of them out of commission, leaving 10 in the service, which was what we had at the beginning of the war; but those warrant officers were commissioned as warrant officers, Army Mine Planter Service, and with the expectation at that time that they would have all of the rights of warrant officers, which include, as of course the committee knows, the right of retirement.

When we put those mine planters out of commission we were in a quandary as to how to handle the warrant officers; but we felt that we had to keep faith with them and keep them in the service as long as they wanted to remain or until they were retired for age; and we have put them on various classes of harbor-boat work under the Quartermaster Corps. We now have 78 in the service. The provisions of the law as carried in the House bill would require the immediate discharge of 38 of those men, which I feel would be very unjust to them. The letter of the Secretary of War sets forth these facts, and recommends remedial action.

Senator WADSWORTH. We understand that you now have 10 boats in commission?

General COE. Yes, sir.

Senator WADSWORTH. Those 10 boats carry 50 warrant officers?

General COE. Fifty warrant officers. We have a surplus of 28 who are doing duty on various quartermaster boats and vessels in the service.

Senator WADSWORTH. The 28 warrant officers have been assigned to similar duty under the Quartermaster General on these harbor boats?

General COE. Yes, sir.

Senator HARRIS. You want to hold them all, do you—the 78!

General COE. We want to hold them until they are absorbed, retired, or discharged at their own request.

Senator WADSWORTH. Can you give us some idea as to their average length of service?

General COE. Masters, 15 years; first mates, 10 years; second mates, 6 years; chief engineers, 18 years; assistant engineers, 14 years.

Senator WADSWORTH. Those are the averages?

General COE. Yes, sir.

Senator WADSWORTH. They run about a dozen years of service, then?

General COE. Yes, sir.

Senator WADSWORTH. How did you come to get such an excessive number?

General COE. We expected to maintain all of those mine planters in the service when we were planning on the basis of an Army of 280,000 men. We had allotments made for that many.

Senator HITCHCOCK. What year was that?

General COE. In 1920.

Senator HITCHCOCK. So that this obligation was incurred at that time?

General COE. Yes, sir; that is, partially.

Senator HITCHCOCK. Prior to that time what were these warrant officers?

General COE. We had 10 mine planters in the service prior to the war. They were provided with warrant officers in 1918, under the act of July 9, 1918. The others came from various sources—some of them from the nautical course which we established at the Coast Artillery School, others from civil life, and others from the service—men who were in the quartermaster service running the harbor boats.

Senator HITCHCOCK. Can not the Government make an increase and then correct it, when it finds it excessive, without being under a perpetual obligation to the men for life to keep them in positions?

General COE. In some cases I think so, Senator Hitchcock; but in the case of the warrant officers, as you know, they came into the service with the understanding that they had retirement privileges. They were given those privileges by the Congress.

Senator HITCHCOCK. Did they come from civil life, do you mean?

General COE. Some of them. As I say, they came from three sources. We established a nautical course at the Coast Artillery School which ran for a year, and we educated men for the positions of assistant engineers and second mates. They went in at the bottom of the warrant officers' list, and I do not see any way in which we could have done anything else.

Senator HITCHCOCK. It is not as though these men had been in the service a long time. The obligation, you say, was only incurred in 1920.

General COE. Some of them had been in the Government service for years before they were made warrant officers.

Senator HITCHCOCK. Yes; but they could revert to that status without having suffered any wrong; could they not?

General COE. I do not see how.

Senator HITCHCOCK. If they were promoted, if you please, to this particular service in 1920, and it was due to a miscalculation as to

the number of men required. I do not see why that could not be corrected without the Government being under a life obligation to these men.

General COE. But the Government actually incurred a life obligation to just the same extent that it does. I think, to officers. Of course, the Government can discharge an officer. I can be discharged to-morrow by the President; but, at the same time, there is a certain obligation. I think, in the case of officers, and in the case of these warrant officers.

AVERAGE PAY OF WARRANT OFFICERS.

Senator HARRIS. What is the pay of a warrant officer, General?

General COE. The pay of warrant officers and men of the Quartermaster Department running the harbor boats is given in the House hearings on pages 1300 and 1301. The average pay proper of the Army Mine Planter Service is, for master, \$2,340; first mate, \$1,584; second mate, \$1,039.20; chief engineer, \$2,210; assistant engineer, \$1,440. They also get additional pay under the act of June 5, and certain commutation of rations and clothing.

Senator HITCHCOCK. If we are going to make a reduction in the Army, that is the very thing we have got to do. If we are going to adopt a policy and live up to it, we have got to discharge and retire a certain number of officers. Is there any moral obligation that we are under to continue these officers while others are being discharged?

Senator WADSWORTH. May I interject just there: It is noted that in this bill and also in legislation pending in the Military Affairs Committees in both Houses, in the matter of reducing commissioned officers, provision is made for their retirement.

Senator HITCHCOCK. Would not that be better here than to continue paying the men?

Senator WADSWORTH. No provision at all is made here for their retirement.

General COE. And we discharge them right along for any inefficiency, Senator Hitchcock, without any question. We have examinations, and we refuse to promote them unless they come up to the highest kind of standard. I would not think of advocating the retention of those men in the service if they were not performing work; but they are performing work for which the Government in one way or another would have to pay just about the same amount.

Senator HITCHCOCK. What class of work are they doing?

General COE. They are on the quartermaster boats in the harbor boat service.

Senator HITCHCOCK. But these warrant officers are receiving more compensation than they would receive for the quartermaster service. are they not?

General COE. No, sir; they are very closely related. The total pay, including commutation of rations, clothing, etc., for a master, for example, of the mine-planter service, is \$3,096.20. The average pay of a master of the harbor boat service is \$3,025, and the same is true for the other grades, approximately.

Senator WADSWORTH. They are about alike?

General COE. Yes, sir.

Senator HITCHCOCK. Then, can they not be transferred to that service?

General COE. They are transferred to that service for duty, but they are retaining their privilege of retirement by retaining their warrants as warrant officers.

Senator HITCHCOCK. The House provision provides for their retirement?

General COE. No, sir; it provides for their elimination.

Senator HITCHCOCK. I mean their discharge.

Senator SPENCER. That is, if you should discharge all these warrant officers you would have to employ other men to do precisely their work at precisely the same compensation?

General COE. At practically the same compensation.

Senator HITCHCOCK. The only difference would be the right of retirement?

General COE. Yes, sir. They would probably get the same jobs, as a matter of fact, right on the harbor boats if they were discharged as warrant officers, but they would lose their right of retirement which we gave them when we appointed them, and we feel that it is not fair.

Senator HITCHCOCK. The bill which we have in incubation, or which is already reported, provides for the retirement of a number of officers.

Senator LENROOT. Are the warrant officers transferred from one service to another?

General COE. No, sir; not these warrant officers. They are warrant officers of the Army Mine Planter Service. There are no other positions to which they could be transferred as warrant officers. Warrant officers in the Army at large are an entirely different type of men and perform entirely different duties.

Senator SPENCER. Then it is your recommendation that the proviso in line 24 be stricken out?

General COE. Yes, sir.

Senator SPENCER. Does that necessitate an increase in the amount of the appropriation?

General COE. I think so.

Senator SPENCER. What increase in the amount of the appropriation would it necessitate if that proviso were stricken out?

Major BROWNE. The finance department will discuss that when we take up the pay of the Army.

Senator HITCHCOCK. It is only about \$100,000 more than is provided for here.

Senator WADSWORTH. That is probably about right.

Senator SPENCER. This proviso would cut out 38 men.

General COE. Yes.

Senator SPENCER. Of whom 10 are now employed and the other 28 are surplus?

General COE. Yes, sir.

Senator LENROOT. As to these quartermaster boats, you say civilian masters would be employed?

General COE. Yes, sir. There is also the following proviso:

No vacancies in the grade of warrant officer shall be filled until the number in such grade is reduced to 600, and thereafter the number shall not be increased above 600.

It is not apparent whether that includes the warrant officers of the Army Mine Planter Service or not. I think the intention was probably to eliminate them from the provision; that is, the total number of warrant officers should be 600, exclusive of warrant officers of the mine planter service. The Secretary of War in his letter pointed out that there is an ambiguity there.

Senator SPENCER. What is your suggested change in that language?

General COE. I think there should be added "exclusive of warrant officers of the Army Mine Planter Service." That would make it perfectly clear. Their title has been not "warrant officers," but "warrant officers, Army Mine Planter Service."

Senator WADSWORTH. The basic law provides for 120 warrant officers?

General COE. Yes, sir; exclusive of warrant officers of the mine planter service.

Senator WADSWORTH. The basic law, as I recall, provides for 120.

General COE. It provides five for each mine planter.

Major BROWNE. One hundred is the number on which we have always prepared estimates.

Senator WADSWORTH. This would act as an amendment to the basic act.

General COE. Yes, sir.

Senator WADSWORTH. That thereafter they shall not be increased above 600.

General COE. Yes, sir.

Senator HITCHCOCK. If these words were "exclusive of officers of the Army Planter Service," there would be no objection?

General COE. No, sir; I simply say that language is ambiguous. We are not sure what it means.

Senator HITCHCOCK. Suppose, for instance, that the mine planter service should be included in that; would that be objectionable then?

General COE. I am not here to discuss that. I suppose that someone else will do that. The only part I can speak of is the mine planter service which I have control of as chief of coast artillery. That point will be discussed by someone else.

Senator LENROOT. It will still cut your 38 men out, at that?

General COE. Yes, sir.

Senator WADSWORTH. I suppose one thing that occurs to you is that with the second proviso in there you could not fill any vacancy even after it occurs in your reduced force. The first proviso reduces you to 40.

General COE. To 40.

Senator WADSWORTH. And the second proviso would prevent your replacing any wastage in that 40.

General COE. Until it was reduced to 600.

Senator WADSWORTH. Yes; but that might be some years.

General COE. Yes; but it would be some years, also, before we would have any appointments to make, because we have a surplus.

Senator SPENCER. But not with that proviso in. You would be reduced to 40, and if one of those men died or resigned you could not replace him.

General COE. I think that is true.

Senator WADSWORTH. Yes; that is so; the number would be reduced from the number authorized under the law down to 600, on account of retirements for age and disability.

Senator HITCHCOCK. How many are there now?

Senator WADSWORTH. One thousand one hundred and twenty in the straight warrant-officer class in the line of the Army. That is the authorized number, and I think they commission pretty near up to the authorized number. I know that it was over 1,000 last year when we had the Army appropriation bill before us. There were just a few vacancies left, and there was discussion then about how they could be filled; so that it will take several years to reduce any personnel by 50 per cent.

General COE. Yes.

Senator WADSWORTH. How old do these men average?

General COE. I have no figures on that, but from my knowledge of the men I would say that the masters would average 50.

Senator WADSWORTH. Fifty?

General COE. Yes; and the junior officers much younger.

Senator LENROOT. Is the pay very much larger than they receive in private life for the same service?

General COE. No, sir.

Senator WADSWORTH. As I remember the testimony before the committee that drafted the Army reorganization act, the pay is actually somewhat less than that received for similar work in commercial vessels, but it is the retirement privilege that holds them in the service.

General COE. Yes, sir. I think it is distinctly less than it is for men in the same class of maritime service in private employ, because they not only have to handle a boat, but they have to be skilled in handling it under difficult circumstances, because mine planting is a very touchy work, and I think, for their qualifications, they are distinctly underpaid compared with what they would be paid in civil life.

Senator WADSWORTH. Is there anything else there?

General COE. No, sir.

Senator WADSWORTH. What is next, Major Browne?

TANK SERVICE.

Major BROWNE. Colonel Rockenbach is here to discuss the tank service.

STATEMENT OF COL. S. D. ROCKENBACH, COMMANDANT TANK SCHOOL, FRANKLIN CANTONMENT, CAMP MEADE, MD.

Senator WADSWORTH. Proceed, Colonel.

INCIDENTAL EXPENSES IN CONNECTION WITH THE OPERATION OF TANK SCHOOLS.

Colonel ROCKENBACH. I have not anything new, Senator, on this subject, that is different from what was presented to the House committee, but we were down to a minimum in our estimates, and I had reason to think that we would get what we asked for there, which

was only 58 per cent of my estimate, and in studying up the thing I believe the reduction is due to an error in printing in the Budget. The figures there do not add up correctly, and they are misplaced. This is on page 343 of the Budget, in the middle of the page. On that page an item reads, "Estimated unexpended balance, 1922, \$5,000." Next below, an item reads, "For incidental expenses in connection with the operation of tank school." But here, you will note, there is nothing put in. Next below, appears again, "Estimated unexpended balance for 1923, \$6,000." This last item is one line too low and as the figures now read the estimated unexpended balance for 1922 is \$11,000 instead of \$5,000. It is thought possible this might have influenced the House committee to reduce the Budget estimate \$5,000.

Senator HITCHCOCK. Where is it put in?

Colonel ROCKENBACH. This is page 343 of the Budget I am referring to. I believe the House committee intended to allow the Budget estimate, and that the cut of \$5,000 is erroneous.

Senator HITCHCOCK. What was your estimate, as a matter of fact?

Colonel ROCKENBACH. Fifty-one per cent of our original estimate was allowed by the Budget. The final allowance was \$31,500 for the tank service and \$3,700 for the tank school.

Senator HITCHCOCK. Do you mean that in place of the \$31,500 they gave you \$26,500?

Colonel ROCKENBACH. Yes.

Senator HITCHCOCK. And in place of the \$3,700—they gave you the \$3,700?

Colonel ROCKENBACH. Yes. Now, taking the misprint in the Budget, they have put down that difference as the saving or an estimated unexpended balance.

Senator LENROOT. I must confess I do not understand about the misprint.

Colonel ROCKENBACH. May I show you my figures here, sir? [Indicating in volume of the Budget.] These figures here should be on this line, instead of that. They have them under "Estimated unexpended balance." If you will add these figures, you will see that makes just \$1,000 difference.

Senator HITCHCOCK. In other words, they gave you \$26,500, instead of \$31,500?

Colonel ROCKENBACH. Yes.

Senator HITCHCOCK. And your estimate was \$31,500, irrespective of what the Budget shows?

Colonel ROCKENBACH. The real Budget estimate was \$31,500 for tank service and \$3,700 for tank school.

Senator HITCHCOCK. They gave you \$5,000 less than you called for there?

Colonel ROCKENBACH. Yes.

Senator HITCHCOCK. But they gave you all that you called for on the matter of operation and tank school?

Colonel ROCKENBACH. I would like to explain there that that is due to the fact that we reported early in this fiscal year a saving of \$5,000 out of \$82,000 authorized by Congress. In February we reported that we could save another \$8,000. This makes a total saving for the current year of 1922 of \$14,000 out of the total of

\$2,000 actually appropriated by Congress last June. This proves our good faith in keeping our expenses down to the minimum needed for efficiency. We are now asking for a total of \$35,200 for next year where we are actually spending \$68,000 this year. This saving was made, you might say, by looking around everywhere in the post, and at places where we could find anything that would answer our purpose we got it. In other words, we entered fully into the spirit of economy that was ordered, and that saving simply means that we got it from other places.

Senator HITCHCOCK. Regardless of the Budget, do you still say that you need \$31,500?

Colonel ROCKENBACH. For the tank service alone, yes. That is 8 per cent of my estimates. The total for tank service and tank school is \$35,200.

Senator HARRIS. You can get along with that?

Colonel ROCKENBACH. Yes, sir; we can get along with that.

Senator LENROOT. There is an error here of \$1,000; that is what it is.

Colonel ROCKENBACH. Yes.

Senator LENROOT. Both figures should have apparently been up in the next line.

Colonel ROCKENBACH. Yes.

Senator LENROOT. How does this error of \$1,000 affect the total of this item?

Colonel ROCKENBACH. That was merely an error in addition. I think we are right down to the minimum at which we can operate.

Senator LENROOT. But the error; what has the error to do with it?

Colonel ROCKENBACH. I was so confident that we had gotten down to the minimum, and our reception by the House committee was such, that I thought we would unquestionably get it; and then in studying this thing over we find there is an error there, which we think may have affected their decision.

Senator HITCHCOCK. The difference here is \$5,000 and the error is \$1,000.

Colonel ROCKENBACH. No; the error of \$1,000 is simply one of addition; the real error comes in the Budget showing an unexpended balance of \$11,000 instead of \$5,000.

Senator LENROOT. I think we had better consider it aside from any error.

Colonel ROCKENBACH. We are here to find out what that was due to.

Senator WADSWORTH. Will you tell me whether you will have a \$5,000 unexpended balance?

Colonel ROCKENBACH. I do not think so—not out of tank school funds. I feel confident that we will not. We have already saved \$1,000 there, and another \$1,000 that we put into our reserve in February. We are sure of that. I think it is possible that we may be able to save another \$1,000, but that simply depends now on the surplus we can get hold of without transfer of funds. I took up the matter of where there are a good many supplies, books, and so on, that we can get from other places.

Senator HITCHCOCK. You had \$75,000 last year, or during the current year?

Colonel ROCKENBACH. We have \$75,000 for the tank service this year, and \$7,000 for the tank school, a total of \$82,000.

Senator WADSWORTH. The current appropriation is \$75,000.

Colonel ROCKENBACH. \$75,000 for the tank service. The total provided for the fiscal year ending June 30, 1922, is \$82,000.

Senator WADSWORTH. The total appropriation is \$75,000, outlined in your estimates here.

Colonel ROCKENBACH. No, sir; the \$75,000 is for the tank service alone. There was \$82,000, of which the estimated unexpended balance was estimated as \$5,000; but we now actually have \$14,000 unexpended balance in sight. The total spent for 1922 will be about \$68,000.

Senator WADSWORTH. \$82,000?

Colonel ROCKENBACH. Yes; that was the total 1922 appropriation.

Senator WADSWORTH. Then the total of the first paragraph was \$75,000?

Colonel ROCKENBACH. Yes; for tank service only.

Senator WADSWORTH. And of the second paragraph was \$7,000?

Colonel ROCKENBACH. Yes; for tank school only.

Senator WADSWORTH. Now we are talking only of the first paragraph.

Colonel ROCKENBACH. Of the \$75,000?

Senator WADSWORTH. Yes.

Colonel ROCKENBACH. That was reduced to \$31,500 in our estimate. That is the way it came from the Budget.

Senator WADSWORTH. And the House has reduced you another \$5,000?

Colonel ROCKENBACH. The House has reduced me another \$5,000.

Senator WADSWORTH. How is that going to affect you?

Colonel ROCKENBACH. It affects me in this way, as I stated before the committee last year, that the 30th of June, last year, I could have saved 90 per cent of that \$75,000, because I had trained mechanics and machinists and soldiers to carry on my work. But in the reduction of the Army we had to discharge all these men. Consequently we had to keep on employing civilians. Now, we actually used 42 civilian employees in 1920-21. For this year we will average 30 civilians. I estimate that I will be in condition by the 30th of June to reduce the total to 21, the number provided for in the Budget estimate of \$31,500; because, instead of having any labor, mechanics, and engineers, I will simply have to have stenographers for administrative work and a few foremen to continue the instructing of the soldiers.

CIVILIAN EMPLOYEES.

Senator WADSWORTH. How many civilians have you at the Tank School?

Colonel ROCKENBACH. We now have 33.

Senator WADSWORTH. Do you think that number will be reduced?

Colonel ROCKENBACH. That number will have to be reduced. For instance, we have to make up most of our own manuals and textbooks. There are three stenographers—three or four stenographers and typewriters—that we have to use for our liaison and in the office of the Chief of Infantry. A board of officers recently recommended that a separate file of all subjects relating to tanks be kept in the office of the Chief of Infantry. Tanks are new. Development is and will be very rapid. This necessitates an unusual amount of

clerical work in connection with training pamphlets and plans for development work, in addition to normal administrative work.

Senator SPENCER. That is a total of seven.

Colonel ROCKENBACH. A total of seven. It will give me one radio mechanic, five mechanics, four auto mechanics, and five machinists. That is 21. Seven of those are stenographers and typewriters.

Senator WADSWORTH. You have 21, then?

Colonel ROCKENBACH. Under this.

Senator WADSWORTH. Under the \$31,000?

Colonel ROCKENBACH. Under the \$31,000.

Senator LENROOT. What is the average of the Army personnel in the Tank Corps at any one time?

Colonel ROCKENBACH. We have, in round numbers, now, 1,700 soldiers; that is, at the Tank School at Camp Meade.

Senator LENROOT. Do you have any activities outside of the Tank School?

Colonel ROCKENBACH. None, except that we train some personnel of other tank organizations, consisting of a tank battalion at Fort Benning, five division and department tank companies, and nine training tank platoons, in addition to the tanks at Meade. For instance, the Third Corps Area tank platoon, which is a corps that goes into that area for the dissemination of the knowledge of tanks in the Army, that leaves me this week. Our Tenth and Eleventh Companies are also formed, and they are ready to go to their stations.

Senator WADSWORTH. You send these trained units to the troops?

Colonel ROCKENBACH. To the troops.

Senator SPENCER. How many tanks have you got?

Colonel ROCKENBACH. We could put in commission about 250 light and 98 heavy.

Senator WADSWORTH. How many have you in commission with the troops?

Colonel ROCKENBACH. We have 397 of the light and 60 heavy.

Senator WADSWORTH. Those are actually in commission with the troops?

Colonel ROCKENBACH. They are ready to operate right now; a battalion at Benning, two light and one heavy battalions at the tank school, 5 divisional and departmental companies, and 9 training platoons with the corps area training centers.

Senator WADSWORTH. They are all ready?

Colonel ROCKENBACH. Yes, sir. We could put in at the Tank School 150 light and 45 heavy tanks. We could put 125 light with the divisions and departments. We have 50 light, that is the battalion at Benning, and 15 heavy. There are also 72 light tanks with training platoons. That gives you a total of 397 light and 60 heavy.

Senator HITCHCOCK. When you speak of 1,750 men, is that exclusive of officers?

Colonel ROCKENBACH. No; that is including officers. You can call it 1,650 for the men and 100 officers.

Senator WADSWORTH. That is in the whole service, of course?

Colonel ROCKENBACH. That is at Camp Meade—the Tank School with demonstration troops.

Senator WADSWORTH. At Camp Meade?

Colonel ROCKENBACH. Yes; that includes 40 student officers and 300 student men.

Senator WADSWORTH. In response to my question a little while ago I thought you said there were 1,750 officers and men in the tank service.

Colonel ROCKENBACH. No; that is at the Tank School. There is very little increase in that, because of the total of 525 divisional troops; there are 400 with the school at Benning, so that that makes a total of everything of about 2,600.

Senator HITCHCOCK. A total at the school and in the service of 2,600?

Colonel ROCKENBACH. Everything attached to the tanks. Of course, tanks is a part of the Infantry, and these student men are simply attached to them.

Senator HITCHCOCK. There are two schools?

Colonel ROCKENBACH. No; one school.

Senator WADSWORTH. The tanks at Benning are assisting in training the Infantry there?

Colonel ROCKENBACH. The tanks at Benning are a special corps with the headquarters staff and in operation with the troops. That is really the only force that is always ready to operate.

Senator HITCHCOCK. Is that total of the men of 1,750 in the school—1,750 are at this school?

Colonel ROCKENBACH. One thousand seven hundred and fifty are at the school. That is going down very rapidly. We get men by transfer from the Infantry. The force has been recruited by the return of troops from Germany. We will lose 200 of those in the next six weeks. They are going out; they can get better jobs.

Senator WADSWORTH. Now, to what figure would you have to reduce your civilians under the appropriation of \$26,500?

Colonel ROCKENBACH. The \$31,500, as I stated, gives me seven stenographers and typists, four machinists, four auto mechanics, five mechanics, one radio mechanic.

Senator WADSWORTH. You have 21 under that?

Colonel ROCKENBACH. Yes, sir. I do not know where to take those from. The work in connection with the office of the Chief of Infantry, where we only send an officer twice a week, requires a clerical force there of at least two. In order to supplement the stenographers available under this bill the Chief of Infantry has recently started a correspondence school in connection with the tanks. Now, I have just begun this school for stenographers and typewriters to meet the reduction in personnel which must occur June 30. If I do not get the material to make stenographers and typewriters by the 1st of June, I can not carry on; that is all there is to it.

Taking out the seven, this will give me one radio mechanic, five mechanics, four auto mechanics, and five machinists. I can not possibly, notwithstanding the fact that some of my officers have done remarkably well and are the senior instructors—I can not get on with less civilian instructors than what I have here. I am always hoping to do it, but it is practically impossible.

Senator HITCHCOCK. These 100 officers are not all instructors?

Colonel ROCKENBACH. No; we have about 1 officer to instruct to 5 student officers and 20 enlisted men. You see, we have officers that are sent from other parts of the Infantry to our school to take the

tank course; so that, to be exact, my 105 officers now—60 of them—are in the student stage. As soon as they get trained, why—

Senator HITCHCOCK. How long does the course of training last?

Colonel ROCKENBACH. It depends on the individual. It runs from six to nine months—one school here.

Senator HITCHCOCK. And yet you count them in these 100 officers—those at the school? They are not teachers, but more than half of them are pupils?

Colonel ROCKENBACH. Just about one-fifth.

Senator WADSWORTH. One-fifth of what?

Colonel ROCKENBACH. One-fifth of the total officers at the school: instructors, and carrying on the overhead work of the school. The rest are with troops or under instruction.

Senator HITCHCOCK. I can not quite understand you yet. You really have not got 2,600 men, then, and you have not 1,750 men in the school?

Colonel ROCKENBACH. Let us call that place the center. We have at that center the tank school, which has a permanent force of 27 officers and 134 soldiers. That is permanent for overhead and instructors. Now, in addition to that we have the Army group, which consists of one heavy battalion and two light battalions. That is supposed to be the reserve that is ready to get out to operate.

In addition to that we have officer and soldier students. They all belong to the Infantry. They are attached there, and on completing their course they go out. Have I made that situation clear?

Senator HITCHCOCK. I do not quite see the use of civilian employees. Why is so much stenography necessary in operating tanks?

Colonel ROCKENBACH. Tanks are new. Development is very rapid. This necessitates frequent revision of manuals and training pamphlets, and much correspondence-reference development work, in addition to the usual administrative routine. That is why we are attempting to replace the clerks that we have lost.

Senator HITCHCOCK. What do the clerks do with regard to tanks?

Colonel ROCKENBACH. At the present time we are writing 14 manuals. We have no literature, no training manuals on tanks. If we get out a lecture for our own use, we average about 100 copies of that.

In addition to that, we have to send copies out to the service in general, to the office of the Chief of Infantry, where they are distributed.

Senator HITCHCOCK. One stenographer can do a big lot of work of that sort with a multigraph.

Colonel ROCKENBACH. Yes; but the original copy must be prepared by a stenographer, and many revisions of each copy is necessary. They are doing a great deal of work. I have invited the committee each year to come there, and I would like very much to show you.

Senator HITCHCOCK. It seems like a lot of overhead expense for a tank school. It seems to me a tank school is like physical training.

Colonel ROCKENBACH. In the school we are operating daily 25 tanks; that is, teaching the driving of them and the employment of the tanks. Those machines can run about four days only before they have to go into the shop. I have a shop tank-maintenance company of 150 men. In addition to that I have about 125 of an ordnance

company. They are learning, but at the same time they are keeping up those machines. The group is operating about 75 machines. They have to go into the shops. You have got to have some permanent people, because the soldier mechanic does not stay with us long enough and the civilians that I have here are foremen in those shops.

Senator WADSWORTH. You say you have seven stenographers?

Colonel ROCKENBACH. I have three. I have estimated for seven: three at the tank school and four to carry on our work in the office of the chief—

Senator HITCHCOCK. You say that work is done by them partly on manuals?

Colonel ROCKENBACH. Manuals, yes; and to get out our correspondence.

Senator HITCHCOCK. Are the manuals the same lectures you go over and over again and again?

Colonel ROCKENBACH. No, sir; I think in the past eight months we have modified that very greatly.

Senator HITCHCOCK. There are new people coming to the school all the time?

Colonel ROCKENBACH. We have new people coming to the school all the time, and we have new machines. I would like to show you our latest development, which is entirely different from anything else. There is nothing else in the world like that [handing photograph to the committee]. That was just sent to Aberdeen last week. For example, in my storehouse there are 5,700 bins for the different parts of the tanks. Now, to have those where we can find them is an enormous piece of work. That is changed every year, and if we are progressing properly in the work, it must change. We get reports from our officers of their experience of the latest verdict of France, and we get it from the War Department. All of that work has got to be rewritten and put into our schools.

Senator HITCHCOCK. Senators, with 100 letters a day, can get along with three clerks and do a lot of work and attend to their work in the departments, and that takes care of a big constituency; yet you have here just a few lectures to reproduce. You have got a constantly changing lot of students. I should suppose that one course would closely resemble another, except as these modifications occur. I can not understand why there is so much of an office force needed for something that means a mechanical education.

Colonel ROCKENBACH. As I say, I think it is very difficult to present this to you in language, but I would like very much for you to see it.

Senator Wadsworth has paid us a visit, and I think he can give you some idea of the amount of work we are doing. In other words, I have one of the biggest mechanical schools. I think, almost in the world. I have constantly there approximately 150 officers and 350 soldiers in the schools for the individuals. Then, outside of that we put them into the groups where we give them practice. We have no tank operation that is not a problem. It is the very best we can do now to get a problem for the operation of a tank company and change it and change our maps, and so on, and it takes two or three officers and sometimes it takes two or three days to get up a problem. That is going on all the time. Just as soon as the weather permits we are

out, and are using every bit of our terrain in the country that it is possible to use.

When you put that down as a problem coming, say, from a division, and work it out—

Senator HITCHCOCK. What is it that you have to work out? I do not understand what it is you have to work out. Of course, when you have a new tank it is different from the others.

Colonel ROCKENBACH. We take the machine that we have, and we get a situation presented, say from a division. That comes down to a tank company which is assigned to a batallion. We have got those orders to prepare from the division right down in brief. We have the maps to make, which we are doing very rapidly now, because we can pick out parts of them, and all those things have to be changed after every class, and almost every problem, because they would be transmitted and they would be learned if we repeated them.

Senator HITCHCOCK. Suppose that you should be reduced to half the number of stenographers you have now, what would happen?

Colonel ROCKENBACH. I am preparing for that, to be frank with you. I prepared for it last year. Now, I am preparing to go to one-half. I will state this. If I can teach soldiers to do this work, we are going to do it.

Senator HITCHCOCK. It is a mechanical problem, after all, that is to be taught to the soldiers.

Colonel ROCKENBACH. That is what it is; and I think we are going to turn out a few stenographers.

Senator HITCHCOCK. We do not care about turning out stenographers. What you have is a mechanical problem to teach.

Senator WADSWORTH. He has quite an administrative problem, also, with an establishment for 1,750 persons. I do not think of any business establishment that would employ less than five stenographers for administrative purposes with that many men. Those men have to be fed and transported, and records kept, and a record each week, I suppose, of what each man is doing in the work.

Senator HITCHCOCK. There is only a difference of \$5,000 anyway.

Colonel ROCKENBACH. I would like to, if I can, impress you with the fact that I have gotten down just as low as I possibly could. Now, as I say, if I succeed this year in training these people, I will have them do the work and save the money. Last year I did not expect to spend 10 per cent of the appropriation.

Senator HITCHCOCK. Can you tell us what is the total cost of the school, not only including this item but also your mechanical plant and everything?

Colonel ROCKENBACH. All this, of course, is left-over material and machines from the war. We have made an estimate that we have something over a million dollars worth of property.

Senator HITCHCOCK. That you are using in the school?

Colonel ROCKENBACH. Which we are using.

Senator HITCHCOCK. I mean what is the total cost of operating. Is that together anywhere?

Colonel ROCKENBACH. Outside of the routine matter of upkeep, this covers it.

Senator WADSWORTH. In other words, this I assume covers everything but food and clothing, transportation and pay?

Colonel ROCKENBACH. General upkeep of the Army.

Senator HITCHCOCK. This, of course, does not include repairs of the machines. You say that a machine is out only four or five days before it has to go into the shop?

Colonel ROCKENBACH. That is carrying on; a great deal of that comes off of the repair material that is in stock; but we get a great deal of upkeep and spares and construction that comes under the ordnance appropriation.

Senator HITCHCOCK. Does this include pay of mechanics?

Colonel ROCKENBACH. This \$31,000 includes the pay of 14 mechanics.

Senator WADSWORTH. Is there anything else, General?

General FARNSWORTH. I think, perhaps, I could help out. Colonel Rockenbach has possibly forgotten the fact that he prepares also the instructions for all tank units away from his schools. For instance, he is at present preparing 14 sets of training regulations, which are pamphlets varying in size and thickness. They are duodecimal size, and of how many pages?

Colonel ROCKENBACH. They will average 125 pages.

General FARNSWORTH. He prepares daily sheets for his students, the instruction being of a practical nature, and the problems being carried out with the tanks and troops as they would be in war, requires, under the system, lesson sheets for each day. They prepare tactical problems which are presented to the students for solution.

That explains, in part, some of the clerical work that I believe was not brought out before.

Senator WADSWORTH. Is there anything else you wanted to ask about, Senator Hitchcock?

Senator HITCHCOCK. No.

Senator WADSWORTH. Is there anything else, Colonel Rockenbach?

Colonel ROCKENBACH. No. I would like to be sure that you understand we are down to the minimum.

ARMY WAR COLLEGE.

STATEMENT OF BRIG. GEN. E. F. McGLACHLIN, JR., COMMANDANT.

General McGLACHLIN. The House bill provides for a reduction of three clerks at \$1,000, one at \$1,400, two messengers at \$720, from the estimate as it appears in the Budget, a total of \$5,840. These changes were made, I think, because I told the House Committee that we now had those actual vacancies. They were carried partly to keep a promise to save some of the current appropriation, and partly because suitable personnel could not be obtained to fill the vacancies.

As a matter of fact, the \$1,400 clerkship has been filled, and a \$1,200 place has been created by the promotion. This and some other economies result in a corresponding lack of efficiency, in deferring to the future work that should be done now in lessening the product available to those who can put it to good use and study, and in throwing upon instructors of high qualifications, rank, and pay work that should be done by the less-paid clerks.

I would like to have those clerkships put back in the bill.

MISCELLANEOUS ITEMS.

There is another reduction of \$4,000 in the miscellaneous items. This is all on one page and that was based, I suppose, on my promise to the War Department that I would save that much money. I do not care to have that put back.

I can save what I promised this year to save, \$4,100, out of one item, and \$4,000 out of another. The \$4,100 item would have been made up by these different clerks. The \$4,000 was made by cutting out an elevator conductor at \$720 and a carpenter at \$1,000, and by the saving in other items of expense. They have been cut out entirely. They were not even put in the budget, that \$1,000 carpenter and the \$720 elevator conductor.

With those exceptions I have no fault whatever to find.

Senator WADSWORTH. You want the clerks restored?

General McGLACHLIN. I would like to have the clerks restored.

Senator WADSWORTH. Is it really a serious cut?

General McGLACHLIN. In the clerks?

Senator WADSWORTH. Yes.

General McGLACHLIN. Yes; I think so, but I do not intend to employ them except to the necessary capacity.

Senator WADSWORTH. I notice this year's appropriation was \$70,100.

TRANSFER OF HISTORICAL BRANCH TO ARMY WAR COLLEGE.

General McGLACHLIN. The difference is this: The historical branch of the War Department was transferred to the Army War College in toto. The clerical force of the historical branch was carried on the Chief of Staff's appropriation. That has been dropped from his estimate and transferred to mine. That explains the whole thing. It is nothing but a book transaction. I am in hopes that the fact that that will make a larger pool for me to call upon in my clerical work may enable me, with experience, to cut down. On the other hand, the Historical Branch is not yet fully organized. We have three officers working on it, when the authorized project is 12, and we have not the corresponding clerical force there, of course. But when those 12 officers are working I think we will need all of them.

Senator WADSWORTH. How long is it anticipated that work will take?

General McGLACHLIN. Oh, it can be laid out for 50 years in the future, or more.

Senator HARRIS. What page is that, please?

General McGLACHLIN. Seven and eight.

Senator WADSWORTH. Are they working on the data and information gathered in the war?

General McGLACHLIN. Yes; quite a lot of very interesting work has been prepared; some small amount of it has been published. Probably a good deal of it, even after it is approved by the Chief of Staff, for reasons of policy can not be published for years, but it can be used in the schools as a subject for study.

We will have one officer in Berlin, one in Paris, and one in London, out of those 12, to get both from our allies and from the Germans

historical data. I have loaned one of my instructors, who has finished his instructional work, to the historical branch, and he is over there now in Berlin. And I might say that they are just as ready to give us their confidential stuff as the French or the British, and we are getting very valuable information from them.

Senator WADSWORTH. He is doing that work separate from the military attaché over there?

General McGLACHLIN. Oh, yes; the military attaché can not do it; he is not trained for it, and their work is only——

Senator WADSWORTH. The work of the military attaché is to keep in touch with military developments?

General McGLACHLIN. Yes; of course, they have helped us a great deal, but it is very difficult to describe to them always what the historical branch wants, and they do not interpret the language the same as the historical researcher does.

Senator WADSWORTH. How many clerks are there at work on the historical work now?

General McGLACHLIN. Eight.

Senator WADSWORTH. Three officers and eight clerks?

General McGLACHLIN. Yes, sir; I have loaned one officer to the historical staff from my instructional staff, and I have borrowed one from him, so there are actually four on historical work. That historical branch does a tremendous lot of preparation of routine replies to inquiries from individuals as to individuals. It looks up personnel records and all that kind of thing, strictly not historical branch work.

Senator WADSWORTH. Should they not go to The Adjutant General?

General McGLACHLIN. It ought to, but so far we have not been able to get that working.

Senator WADSWORTH. You will, however?

General McGLACHLIN. I think so.

Senator WADSWORTH. Because that will grow to be a nuisance?

General McGLACHLIN. Yes; it is a nuisance now. We are gradually working around to it. It will be all right.

CIVILIAN EMPLOYEES.

Senator WADSWORTH. Have you given us yet, in your testimony, how many civilian employees you have there now?

General McGLACHLIN. No, sir.

Senator WADSWORTH. The number?

General McGLACHLIN. The total authorized are 33 clerks, 22 subclerical, and 6 mechanical, a grand total of 61; and there are vacancies existing of 7; 5 clerical and 2 subclerical.

Senator WADSWORTH. So you have 54 actual?

General McGLACHLIN. Yes, sir.

Senator WADSWORTH. And you want 61?

General McGLACHLIN. I do. It seems like a great deal, I think, to anybody who does not see the work that is going on. I circulate around a great deal, and if I see them reading newspapers I find them work; but that does not happen very often. Also we get extra work from them. It is a very fine force, and they do not hesitate to come back on Sunday morning and sometimes in the evenings to work when it is necessary.

Senator WADSWORTH. Are there any questions you want to ask, Senator Harris?

Senator HARRIS. No.

Senator WADSWORTH. Anything else you want?

General McGLACHLIN. No, sir; except I wish you would come down on Saturday morning. There will be a critique of the war game that I wrote about to all the members of the Military Committee and invited them to see.

Senator WADSWORTH. We will be right here Saturday morning, working on this job. We thank you.

Major BROWNE. We have just one more item, Mr. Chairman; the office of the Chief of Staff, Colonel Hickman.

STATEMENT OF LIEUT. COL. EDWIN A. HICKMAN, GENERAL STAFF.

CLERKS, MESSENGERS, AND LABORERS, OFFICE OF THE CHIEF OF STAFF.

Colonel HICKMAN. Mr. Chairman, in reference to the item "Clerks, messengers, and laborers, office of the Chief of Staff," which occurs on page 6, beginning line 20, and ending with line 2, page 7, of Union Calendar No. 301, H. R. No. 10871, Report No. 791, Sixty-seventh Congress, second session, the attention of the committee is invited to the statement of Lieut. Col. Edwin A. Hickman, General Staff, in reference to this matter beginning on page 272 and ending on page 279 of the hearings on the War Department appropriation bill, fiscal year 1923, before the subcommittee of the House Committee on Appropriations. The number of clerks and rates of pay included in H. R. 10871 for the operation of the Chief of Staff's office, exclusive of the Military Intelligence Division, are satisfactory to the War Department, except the number of clerks of the \$1,400 grade noted in line 23 of the bill referred to should be increased from 18 to 20; and the number of \$1,200 clerks carried in line 23 should be increased from 20 to 21.

This increase would then provide for clerks, messengers, and laborers, office of the Chief of Staff, as follows:

1 chief clerk, at \$2,500	\$2,500
1 clerk, at \$2,250	2,250
4 clerks, at \$2,000	8,000
6 clerks, at \$1,800	10,800
10 clerks, at \$1,600	16,000
20 clerks, at \$1,400	28,000
21 clerks, at \$1,200	25,200
20 clerks, at \$1,000	20,000
1 chief messenger, at \$1,000	1,000
3 messengers, at \$840	2,520
9 messengers, at \$720	6,480
1 laborer, at \$720	720
97 Total	123,470

As is to be noted, this total of 97 is 9 less than was explained to the House committee on page 277 of the House hearings above referred to, and results from the fact that this number of clerks were dropped from this particular item due to the fact that they are employed in the Military Intelligence Division of the General Staff and should be paid from the appropriation item "Contingencies,

Military Intelligence Division," which has been, or will be, explained to the committee by the officer explaining that particular item of the appropriation.

It is felt that nothing further need be said in reference to this item other than to say that the clerks above asked for, being an increase of three over that which the Appropriations Committee of the House reported, are necessary for the efficient operation of the office of the Chief of Staff.

Attention is also invited to the fact that no clerks in this office are now being paid from any lump-sum appropriation, nor is it contemplated having any clerks in this office for the fiscal year 1923 that are paid from any lump-sum appropriation.

Senator SUTHERLAND. Have you any further observation?

Colonel HICKMAN. No, sir; that is all, sir.

Senator SUTHERLAND. Have you any questions to ask?

Senator HARRIS. You feel it is absolutely necessary to have these clerks in order to do efficient work?

Colonel HICKMAN. Yes, sir; I do.

Senator SUTHERLAND. If that will be all, we are very much obliged to you.

Major BROWNE. Those are all the services we have scheduled for this morning.

Senator SUTHERLAND. All right; then we will meet at 2.15.

(Whereupon at 12.30 o'clock p. m. the committee recessed until 2.15 o'clock p. m.)

AFTER RECESS.

The subcommittee reconvened, pursuant to the taking of the recess, at 2.15 o'clock p. m., Senator James W. Wadsworth presiding.

OFFICE OF THE SURGEON GENERAL.

STATEMENTS OF MAJ. GEN. M. W. IRELAND, SURGEON GENERAL, ACCOMPANIED BY COL. EDWIN P. WOLFE, BUDGET OFFICER.

PAY OF OFFICERS, OFFICERS' RESERVE CORPS.

Senator SPENCER. What page are you on, General Ireland?

General IRELAND. I would like to begin on page 17.

Senator SPENCER. The Finance Department?

General IRELAND. If we may strike out the word "medical," in line 18, the last word in line 18 on page 17, and just leave it to read "Reserve Corps," that will enable us to employ dental surgeons as well as medical officers.

Senator WADSWORTH. Or you might put in the words, "and dental"?

General IRELAND. Yes; but if the word "medical" was omitted, that would fix it.

Senator WADSWORTH. If you strike out the word "medical"?

General IRELAND. Yes; the proviso loses something of its specific meaning. It would then be lawful, at least, to employ other than medical officers or dental officers in the care of the beneficiaries. We would be very glad to say there, "medical or dental reserve corps."

Senator WADSWORTH. "Medical or dental"?

General IRELAND. Yes; then it should be "members of the Army nurse corps," or it should be "reserve nurses," so it would read "medical and dental reserve corps and reserve nurses."

Senator SPENCER. You suggest the language "medical and dental reserve corps and reserve nurses"?

General IRELAND. Yes.

Senator SPENCER. Reserve nurses?

General IRELAND. Yes; that is what they are called in the Red cross.

PAY OF NURSES.

On page 20 of the bill you have: "For pay of nurses, \$509,270." That reduces the number of nurses to 500, which is not sufficient to carry on the work of the Army. We ought to have 665 nurses to do that work, and the appropriation should be \$665,090.

Senator WADSWORTH. You have made a supplemental estimate, because the Budget estimate was \$746,520. Now you come below that estimate?

General IRELAND. We were estimating on 150,000 men in the Army men.

Senator WADSWORTH. What are you estimating on now?

General IRELAND. We are about 132,000.

Senator WADSWORTH. One hundred and thirty-two thousand?

General IRELAND. Yes; 133,000, as a matter of fact.

Senator WADSWORTH. How do you get that?

General IRELAND. For the officers and Philippine scouts as well as the enlisted men.

Senator HARRIS. How much do you feel that you have to have?

General IRELAND. We ought to have 665 nurses, which would require \$665,090.

Senator WADSWORTH. Now, I wish you would develop that discussion a little. Tell us about the nurses, and what would happen if you only had 500 nurses?

General IRELAND. We would have to abandon the nursing service in all places except our general hospitals. We would have to abandon the nursing service in the smaller stations and the flying stations and such places as the dispensaries, and in camps, and just confine the nurses to the general hospitals.

Senator WADSWORTH. Now, where are your general hospitals?

General IRELAND. We have a general hospital here, at Walter Reed, and one Fitzsimons, the hospital at Denver.

Senator HARRIS. How many nurses are there at Walter Reed Hospital?

GENERAL HOSPITALS.

General IRELAND. At Fitzsimons, the large tuberculosis hospital at Denver, and the Letterman General Hospital, at the Presidio, of San Francisco, Calif., the Beaumont Hospital at El Paso, Tex., the Army and Navy Hospital at Hot Springs, Ark., and the Station Hospital at Fort Sam Houston, Tex., which is used for general hospital purposes.

It is a large hospital and has never been designated as a general hospital, but it has been used for that purpose since 1915.

Senator WADSWORTH. Is that all?

General IRELAND. Those are the general hospitals; yes, sir. Of course we have the equivalent of general hospitals in foreign stations, in Honolulu and the Philippines; but they are not administered as general hospitals.

Senator WADSWORTH. Would you have to withdraw the nurses from them?

General IRELAND. No, sir; we would take care of the sick there with nurses. But we would have to withdraw the nurses from the camps and the smaller stations where they are distributed.

Senator WADSWORTH. Would you have to withdraw the nurses, for instance, from Camp Meade?

General IRELAND. I think so.

Senator WADSWORTH. And from Camp Eustis?

General IRELAND. I think so. Yes; and from Fort Leavenworth, too.

Senator WADSWORTH. And Camp Benning?

General IRELAND. And from Camp Benning.

Senator WADSWORTH. From Leavenworth, Kans.?

General IRELAND. Yes.

Senator WADSWORTH. And from Camp Knox?

General IRELAND. Yes.

Senator WADSWORTH. How many nurses have you?

General IRELAND. We have in service to-day 834 nurses.

Senator SPENCER. How many will this provide for?

General IRELAND. Five hundred. Of the 840 nurses in service to-day, 125 are reserve nurses employed at the expense of the Veterans' Bureau.

Senator SPENCER. That would leave 715 on your pay roll?

General IRELAND. Yes.

Senator SPENCER. Just give us what you have on your pay roll.

General IRELAND. Six hundred and forty-four.

Senator WADSWORTH. To-day?

General IRELAND. Yes. Eight hundred and forty minus 125. It is 125 from 840.

Senator SPENCER. Seven hundred and fifteen nurses you have to-day?

General IRELAND. Yes.

Senator SPENCER. And this bill with \$509,280 will take care of how many?

General IRELAND. Five hundred nurses.

Senator SPENCER. And your estimate of \$665,900 would take care of 715?

General IRELAND. It would take care of 665.

Senator HARRIS. About \$1,000 a nurse?

Senator SPENCER. You want \$665,900?

General IRELAND. Yes.

Senator SPENCER. How many nurses would that take care of?

General IRELAND. Six hundred and sixty-five. We require two nurses per thousand of the commissioned and enlisted strength of the Army.

Senator SPENCER. Then you would reduce the present force from 715 to 665?

General IRELAND. I think that is so; yes, sir.

Senator WADSWORTH. Now, another thing, General; that is, the amount that we are discussing as necessary for the pay of the nurses—that is calculated on the basis of the pay schedule for what year?

General IRELAND. I presume the present schedule; but on whatever schedule based, we can not get along with fewer than two nurses per thousand strength.

Senator WADSWORTH. Is the present schedule of the pay of the Army Nurse Corps permanent?

General IRELAND. No, sir; not yet. The Army Nurse Corps got a bonus with the rest of the Army about two years ago.

Senator WADSWORTH. Is not this estimate, for example, of \$509,000 for 500 nurses on the basis of the pay schedule prior to the bonus?

General IRELAND. I do not know as to that. We have nothing to do with that.

Senator WADSWORTH. That is exceedingly important. That is the only way that you could measure the number of nurses you are going to have.

General IRELAND. But our estimate that the \$509,000 will give us 500 nurses is based upon the present pay.

Senator WADSWORTH. Upon the present pay?

General IRELAND. Upon the present pay of nurses; and the \$665,090 for 665 nurses is on the present pay.

Senator WADSWORTH. Do you understand that the House intended you to have 500 nurses under their appropriation?

General IRELAND. I do not know, sir.

Senator WADSWORTH. Because the pay of the Army paragraphs here in the House bill are all based upon the permanent pay schedules of 1908.

General IRELAND. Yes.

Senator WADSWORTH. And not on the present pay.

General IRELAND. These estimates are all on the present pay. Now, if you so desire, in correcting my hearing I can transpose that to the 1908 pay.

Senator WADSWORTH. Personally I hope the new pay bill goes through, which would protect the nurses against the drastic reduction.

General IRELAND. Yes.

Senator WADSWORTH. It gives them a slight increase over what they are getting to-day and on the temporary roll.

General IRELAND. Yes.

Senator WADSWORTH. And they certainly deserve it.

General IRELAND. Yes; there is no question about that.

Senator WADSWORTH. They are fearfully underpaid.

General IRELAND. Yes.

QUARTERS FOR HOSPITAL STEWARDS.

The next item is on page 44:

For maintenance and repair of quarters for hospital stewards at military posts already established and occupied, \$5,000.

Our estimate was \$15,000. It was reduced by the War Department to \$10,000, and we think that is the minimum. With only \$5,000

there is no doubt that the quarters would deteriorate for lack of repairs, and we hope we may have the \$10,000. I might say that the average for a good many years past has been \$11,000—of the appropriations that we have had.

Senator WADSWORTH. Have you got the prewar figures before you?

General IRELAND. I have that here; yes, sir.

Senator HARRIS. Do you spend it all every year, Doctor?

General IRELAND. Oh, yes, sir. I have it here. For 1911 it is \$15,000, for 1912 it is \$10,000, for 1913 the estimate was not available for some reason, for 1914 it was \$9,700, for 1915 it was \$9,700, for 1916 it was \$12,500, and for 1917 it was \$14,043.

The average for the seven-year period is therefore more than \$11,000.

Senator WADSWORTH. Have the buildings been maintained in a constant state of repair?

General IRELAND. They are in uniform good condition; yes, sir.

Senator WADSWORTH. How many quarters are there, do you recollect?

General IRELAND. Colonel Wolfe says he thinks there are about 168.

Colonel WOLFE. They are at practically every permanent station of the Army.

General IRELAND. At some stations they have several sets of quarters. At a place like Fort Leavenworth they have three or four sets of quarters. I am sorry that I do not remember the exact number.

Senator WADSWORTH. There are about 168?

General IRELAND. Colonel Wolfe thinks the number is about that.

Senator WADSWORTH. You think it would not be less than that?

General IRELAND. No; but I will insert the exact number in the hearing.

Senator WADSWORTH. What is the usual type of the building?

General IRELAND. That depends on the part of the country where they are built. Out here at Walter Reed they are of brick. At Fort Leavenworth, where there is plenty of stone, they are built of stone. At the Presidio there are wooden quarters. At Fort McKinley they are of concrete and frame construction; but they are relatively small buildings.

CONTEMPLATED REDUCTION IN COMMISSIONED PERSONNEL OF MEDICAL DEPARTMENT.

Senator WADSWORTH. What is next, General?

General IRELAND. Senator, that is all I have to say, except as to the personnel.

Senator WADSWORTH. Go ahead with that, then.

General IRELAND. This is on page 15. This bill makes very drastic reductions in the medical department of the Army. It reduces the Medical Corps from 1,137 to 793, the Dental Corps from 236 to 133, the Veterinary Corps from 161 to 109, the Medical Administrative Corps from 138 to 61.

That will reduce us so much that it will not be possible for us to carry on the work required of us.

The reorganization of the Army of 1908 gave us seven-tenths of 1 per cent of the Medical Corps for the Army, which then was running along from 60,000 to 65,000 men.

After the Army was increased we were authorized to employ contract surgeons or reserve officers to make up any deficiency that occurred, and I might say that there never was a time until last year that we were not employing contract surgeons or reserve officers to carry on the work of the Medical Corps.

The act of 1916 reorganizing the Army gave us a percentage of seven-tenths per thousand of the enlisted strength of the Army, and that percentage was in reality repeated in the 1920 bill, for we received sixty-five one-hundredths of 1 per cent for the Medical Corps and five-tenths of 1 per cent for the administrative corps. The administrative officers are doing work which was formerly done by the Medical Corps, so we still have that number of officers.

Senator WADSWORTH. That is, seven per thousand?

General IRELAND. Seven per thousand; seven-tenths of 1 per cent of the enlisted strength of the Army, which is seven per thousand.

Since that time a great many additional things have been required of the Medical Department for which we have received no additional personnel.

In the reorganization of the Army several thousand officers were given to the line of the Army for the training work—extra officers, I mean, were given to the line for training work which is to be required of the Army—but we did not receive any additional officers for such work.

The Army has really become a great training organization for the National Guard and the Organized Reserves, for the R. O. T. C. units, and for the civilian training camps, and it requires medical officers in great numbers to carry on this work.

In addition to that we have agreed to take care of a certain number of the war risk insurance patients. We have 1,800 of those patients in our hospitals now, and that requires personnel.

The training of the Organized Reserves makes a very heavy demand upon us. It will take at least 60 medical officers to carry on this work with the plans that the War Department has projected at the present time.

The R. O. T. C. units will require 60 officers at least to carry on that work.

There are more than 60 A-class medical schools in the United States, and we hope eventually to have a R. O. T. C. unit at practically every one of the A-class schools—in all of them where the classes are large enough to give us the minimum of 50 in a class.

The National Guard requires a great many medical officers. Fifty-eight have been assigned to the scheme that the War Department has for that work.

In addition to that only about 50 per cent of our officers have been trained—that is, have been given the special training in the duties of a medical officer. They have come in since the war and have not been passed through our field training school or the Army Medical School. That is a problem that we have to face for the next half a dozen years to pass these men through our schools. It takes trained medical officers to carry on this work of training for the National Guard.

Senator HITCHCOCK. Is there any difference between a physician in civil life and a physician in the Army? Is there any difference between a surgeon in Army life and one in civil life?

General IRELAND. There is a very decided difference, Senator. Of course, the operation that is done in a military hospital is just exactly the same as the operation that is done in a civil hospital, but the duties of a medical officer is altogether different from the duties of a physician in civil life.

Senator HITCHCOCK. In peace times?

General IRELAND. In peace times; yes. The physician in civil life who finds himself transposed to a military post is lost in his duties if he has not special training. In the education of medical men in civil life they have a six-year training in medical schools and one year's training in a hospital. They are considered then competent to go out and take care of the sick at that time. That is the requirement of most of the States—the minimum requirement in most of the States of the United States—at the present time. But, in addition to the training that they have there every medical officer is potentially a public health officer for the post and for the people that he serves, and all of our men have to be trained in that work. The work at the Army Medical School is 50 per cent public health work. In addition to that our men are taken to the school and are trained in extra work. Every officer who goes through the Army Medical School is competent to take down and put up an X-ray machine, to take his own pictures and develop them—in the smallest post, if necessary. The officer has to become accustomed to the group way of doing the work that is carried on in the Army; and, more than that, he must become accustomed to taking care of himself and of troops in the field, which is altogether a different proposition from the practice that a man meets in civil life. It is a very common fallacy, Senator, that a doctor in civil life is just the same as a doctor in the Army; but if you will pick up any of your friends, who went into the Army during the war, they will tell you very frankly that they were perfectly lost in the Army until they got themselves oriented in the duties of a medical officer.

Senator HITCHCOCK. In connection with the R. O. T. C., what function has the medical man? You spoke of needing a certain number of the members of the R. O. T. C.

General IRELAND. Yes. We take those men—students—and during a period of four years we give them certain instructions 90 hours each year in the duties of a soldier; and, finally of a medical officer. and during one of the summers we take them to one of our camps and put them into camp and make them familiar with the instruments they will have to work with when they go into the field. Now, that is going to be one of the most important experiments in training men to know the duties of a medical officer that we have, because, after this training has been going on for a certain length of time, every student that graduates—that has gone through this training—will be fairly familiar with the duties of a soldier and with the duties of a medical officer. As soon as he graduates we hope to take him at once into the Medical Officers' Reserve Corps and to make him a potential force for the country in time of emergency. We have the same functions to perform in the line; that is, to perform with the Artillery, the Infantry, and the Cavalry.

Senator HITCHCOCK. You still retain the feeling that there ought to be 7 per 1,000, that you argued for several years ago?

General IRELAND. Senator, 7 per 1,000 is the minimum number we can get along with in taking care of the Army itself. Seven per 1,000 is not enough for us to carry on these other activities.

Senator HITCHCOCK. I was just figuring up what 7 per 1,000 would be if there were that proportion of physicians and surgeons here in Washington, with a population of 400,000. There would be 2,800 physicians and surgeons here in Washington.

General IRELAND. I am not prepared to answer that question, exactly, but I think there are more than that.

Senator HITCHCOCK. More than 7 per 1,000?

General IRELAND. Yes.

Senator HITCHCOCK. I hope there are not anything like that many.

Senator SPENCER. That 7 per 1,000 would include the families of officers.

General IRELAND. Not only that, but if you have a post, whether it has 1,750 men or only 75 men, that takes a doctor.

Senator HITCHCOCK. Yes.

General IRELAND. We avoid that wherever we can by employing here what we call a subcontract, some doctor at a place near by who will be given \$75 a month to take care of the small number of patients where there is a small command; or, if the command is small enough, we even authorize the commanding officer to secure treatment from a civilian doctor near the post that is satisfactory to him.

Senator SUTHERLAND. Do they not charge so much per call?

General IRELAND. So much per call; yes, sir. That, of course, is in the case of very small commands.

Last October the difficulties of medical officers became so acute that I presented to the War Department a statement of the requirements of the Medical Department to carry out the policy of the War Department under the act of 1920; and it called for 1,425 officers. Now, the members of the Staff Corps at the War Department believe that when they present a claim of this kind to the General Staff and receive the approval of the General Staff, that they have not overestimated their demand. I have been told by a member of the General Staff that after a very careful review of that letter they had figured out that we needed 1,777 officers, which was approximately what I had asked for.

The elimination bill prepared by General Pershing gave us 1,053 officers regardless of the size of the Army, and I think that is the minimum number that we can get along with.

Senator JONES of Washington. That is in the Medical Corps?

General IRELAND. I am talking of the Medical Corps, sir.

Senator JONES of Washington. Yes.

General IRELAND. Take the number of officers allowed under the present law for an enlisted force of 150,000 men. I believe that that is the very minimum number. When the General Staff stated that number to me I agreed to it, with the understanding that after we were cut down to that number I should have the privilege of going to the War Department and presenting my case again if we could not get along with that number.

Senator WADSWORTH. In other words, you contend that even though the Army falls below 150,000 enlisted men you will nevertheless need a quota of medical officers which will necessarily go with 150,000 men?

General IRELAND. Even if you knew to-day that the Army was going to be 100,000 men it would not make a particle of difference. One thousand and fifty-three men will not be enough to meet the requirements that the War Department has made under the act of June 4, 1920, and that is the number that I am asking for, because that is the number that is allowed in the War Department's elimination bill.

Senator WADSWORTH. Yes; I remember that is the number in the pending measure. There is an exception made in the matter of medical officers. In other words, it is recognized that they can not be reduced in the same ratio as the other branches.

General IRELAND. I would like to repeat, Senator, that that exception was made without insistence from me. It was agreed to before they brought the bill to me. I think that is a fair indication.

Senator HITCHCOCK. Did we have seven per thousand during the war?

General IRELAND. Oh, yes; we had at the peak 30,591 doctors.

Senator HITCHCOCK. In times of peace should not the proportion be much lower, when the men in the Army are leading regular lives and are on regular rations?

Senator SUTHERLAND. What was that number of doctors per thousand men?

General IRELAND. I do not know the strength of the Army at that time.

Colonel WOLFE. About eight per thousand.

Senator HITCHCOCK. In times of peace, as I say, when the men are leading regular lives and are on regular rations and are at regular posts, is there need for so many men as there is in war times, when the soldiers are being subjected to hardships and being wounded?

General IRELAND. The answer, if you put it that way, would be no, but that would be a misleading answer. In war your men are grouped together by the thousands. In time of peace the Army is distributed over such a tremendous field that it eats up medical officers in small stations.

Senator HITCHCOCK. According to Secretary Weeks a lot of these stations are to be closed and there is to be a concentration. Under those circumstances should there not be some reduction and the concentration of medical officers?

General IRELAND. In the administration of the Army a concentration means a smaller number of medical officers. At a post of 2,500 or 3,000 men you can save medical officers. But that question of concentration has been before the War Department for many years. In the 1908 bill, when we were asking for the great number of 445 medical officers in our reorganization, we had to prepare a table showing exactly where we were putting these men, and the statement was made then that there might be a change in the distribution of the Army. I want to say that there has no change come yet. Senator, and the demand for medical officers has been greater and greater all the time. The demand for medical officers to-day is greater than it was a year ago to-day.

Then there is another very serious thing with us. The demand for professional treatment to-day is away beyond where it was 10 years ago. We could not get by for a minute with the treatment that we gave in our hospitals and dispensaries 10 years ago, if we wanted

to. As an illustration of that, I can bring the question right home. I remember very well 15 years ago we thought that two officers in the dispensary here were ample to take care of the work of the attending surgeon in this city. There are 15 officers and one contract surgeon there to-day. But that has been reduced recently by order of the Secretary of War, and with our consent, by one officer. That was done after I asked that an inspector make a thorough investigation as to what they were all doing and whether they were all occupied in legitimate work.

NUMBER OF CONTRACT SURGEONS.

Senator HITCHCOCK. Can you give us figures showing the expenditures for the current year for contract surgeons?

General IRELAND. I have asked Senator Wadsworth that the expenditures question should be taken up by Colonel Wolfe. How many contract surgeons have we had during the current year?

Senator HITCHCOCK. How many were there?

General IRELAND. Colonel Wolfe says we have had 36 contract surgeons during the year. With one or two exceptions they have been used for just what I said, for these subcontracts to save medical officers. There are two or three exceptions to that. One of the doctors at the attending surgeon's office is a contract surgeon, a woman, an expert in nose and throat work.

Another contract surgeon is the editor of the Medical and Surgical History of the War. She is a graduate physician and an expert in editorial work.

Senator HITCHCOCK. I suppose if there was an excessive cut made here in the bill in an appropriation you could supplement the matter by employing other contract surgeons?

General IRELAND. Or reserve officers. The number of contract surgeons is limited by the sum appropriated therefor.

Senator WADSWORTH. This bill does not permit that.

General IRELAND. We got into trouble of that sort in connection with the Veterinary Corps, which I will explain in a very short time; but there is nothing gained by that, because it costs as much to get reserve officers in the different grades as it does to have our regular officers to start with, and they will not stay with us for any considerable length of time. None of the professional men that we want will stay with us, for the simple reason that the tenure of their positions is not permanent, and they want to get themselves settled in civil life. That is the reason there was such a demand on the part of the temporary officer to go back to his work.

Senator HITCHCOCK. During this last year you had a little above the proportion of seven per thousand.

General IRELAND. That is because they reduced the Army. You know, when the bill passed in 1920, they told us we should provide medical officers for 280,000 men and in the examinations held during the fall and summer of 1920 we took in more than 400 officers. At one time we had more than 1,200 medical officers. That fall the appropriation bill reduced the Army to 150,000 men. That made us a surplus at once, which we have been absorbing since. We have not taken a single officer into the Medical Corps since October, 1920.

Senator WADSWORTH. You now have 1,137?

General IRELAND. We have 1,137.

Senator WADSWORTH. And you are about 100 over the quota for 150,000 men?

General IRELAND. One hundred and fifty thousand would give us 1,053, sir.

Senator HARRIS. How do you get rid of these surplus officers?

General IRELAND. The elimination bill provides that we can do it in two ways. The so-called General Pershing bill provides that an officer shall be discharged by a board of five general officers, with the privilege of retirement, under certain conditions. My opinion is that if that bill should become a law this question would take care of itself.

The other way would be to allow us to absorb the excess as time goes on; and they are being absorbed very rapidly.

Senator SUTHERLAND. That number includes the dental service?

General IRELAND. No, sir; the dental service is altogether a separate proposition.

Senator SUTHERLAND. That does not include the dental surgeons?

General IRELAND. No; that is a separate proposition. I will come to that in a minute.

Senator WADSWORTH. Pay of the enlisted men of the Army commences on page 15 of the bill.

General IRELAND. Yes.

Senator WADSWORTH. That brings about theoretically and necessarily a reduction to 793 Medical Corps officers and 61 administrative?

General IRELAND. The injustice of that is that of certain things required of us, for which a great number of extra officers have been given to other branches of the service, we have been given nothing. It is perfectly right that those other officers should have been given, but we would like to have enough officers to carry on our own work.

Senator WADSWORTH. How about the dental officers?

General IRELAND. Now, as the administrative officer is so closely associated with the medical officer in the seventeenth of 1 per cent. may I take that up next?

Senator WADSWORTH. Yes.

General IRELAND. This bill reduces the number of administrative corps officers of the Medical Department from 138 to 61.

For the same reasons that I have given for the Medical Corps. I think the number of administrative officers should be fixed at 81, as the elimination bill which was prepared in the War Department requires, and that they should be eliminated in the manner prescribed in that bill. It eliminates a certain number—17 right now—and leaves 40 officers to be absorbed by retirements, discharge, resignation, etc.

Senator WADSWORTH. I suppose those medical administrative corps officers are employed in many of the large hospitals?

General IRELAND. Yes; not altogether. They are employed in the hospitals and supply depots and at the larger posts in doing work that medical officers used to perform—adjutant, quartermaster, and supply officers. They are most valuable men to us, and they are doing exactly what we said they would do when we were willing to give up five-tenths of 1 per cent of our strength of the Medical Corps to get them. That is one corps that was organized without

a cent of expense to the Government. The fact is that it saved money to the Government, because they do not attain as high rank as medical officers. It is the only corps in the United States Army that is made up of former enlisted men. Every one of those 138 men is an old and tried noncommissioned officer, ranging in term of service from 30 years down.

REDUCTION OF COMMISSIONED OFFICERS DENTAL CORPS.

This bill reduces the Dental Corps from 230, the present number, to 133. The Dental Corps is allowed one officer to every thousand enlisted men and officers. Now, that was the allowance that was given the Dental Corps when the corps was organized, or when it was first recognized would be the better way of putting it, in the 1901 organization, provided that not more than 30 dental officers should be employed. In the reorganization of the corps in 1911 there is the same allowance, provided the number should not exceed 60.

In the 1916 reorganization of the Army they were given one per thousand of enlisted men and officers.

When they first came into the Army they were assigned to the different departments, and they traveled from one post to another with their kit, and gave temporary treatment to the officers and soldiers. A dentist would go to a post for a week or 10 days or two months, according to the size of the post, do whatever temporary work was to be done there, and then pack up his kit and go to the next post. It was a most inefficient way of doing the work, and, of course, with the number employed, but a comparatively small number of enlisted men and officers, the personnel of the Army, received dental treatment.

With the increase of the Army the number of dental officers was increased, and by allowing them a strict percentage compared with the size of the Army.

Now, the dental work required of these officers has increased tremendously, and the position of the dental officer has become a great deal more important in the last half a dozen years. The question of focal infection, which we did not understand 20 years ago, is of immense value in salvaging men. One to a thousand will not answer the purpose at all.

In addition to that, the dental man is required in all these extra activities that have been put on the Army by the 1920 bill, just the same as the medical officer is required; in the final establishment of the R. O. T. C. units they expect to have 19 or 20 officers assigned to that work. They must have dental officers with the Organized Reserve and with the National Guard. The elimination bill gives them 177 officers, and I think that is certainly the smallest number that should be allowed.

Senator WADSWORTH. What is the idea of having undertaken to teach men of the National Guard dentistry? Is that the purpose of having them there?

General IRELAND. No, sir; it is in these camps that we have. There has got to be a dental surgeon in all of these camps.

Senator SPENCER. It is not to teach them, but to treat them.

General IRELAND. But in the Organized Reserves the dental profession is organized, and I might say that they come into the reserve corps better than any other organization in the United States—in greater numbers. They must be taught their work and their position in the Army, just the same as any other officers.

Senator HITCHCOCK. I do not quite understand this situation. You do not undertake to have in the Medical Corps of the Regular Army enough medical men to supply not only the Regular Army but the Officers' Reserve Corps and the National Guard, do you?

General IRELAND. No, sir; but we do have enough, or we ought to have—we have not, but we ought to have—enough trained medical officers so that we can go out into the camps in the summer and instruct the Organized Reserves.

Senator HITCHCOCK. There it is, you see; they are instructing.

General IRELAND. And that is exactly what the seven per thousand of these medical officers were given to the Medical Corps for.

Senator HITCHCOCK. For dental purposes, also?

Senator WADSWORTH. Not for dental purposes.

Senator HITCHCOCK. Is the Dental Corps making a practice of teaching dentistry?

Senator SUTHERLAND. They teach men how to take care of their mouths.

General IRELAND. We are teaching the dental man his place in the Army, just the same as we are teaching the medical man.

Senator HITCHCOCK. Is there any difference between dentistry in the Army and in civil life?

General IRELAND. The dental man transported into the Army from civil life would be just as much lost, if he did not know his place and duties in the Army and how to do his work in the Army, as the doctor from civil life would be.

Senator HITCHCOCK. Would he not be able to clean the mouth or pull a tooth?

General IRELAND. He has to work with the organization of the Army and with the instruments that he has. It is just as different from the fine office in the city, the equipment he has to work with in the Army, as anything can be.

Senator HITCHCOCK. I can not see——

Senator WADSWORTH. I think you ought to spend some months in camp and you would see the difference.

Senator HITCHCOCK. I probably have roughed it as much as you have.

Senator WADSWORTH. I am not speaking of roughing it, but of the work in military camps. It is quite different.

Senator HITCHCOCK. It may be, but it does not seem to me to be a part of the regular expenditure for the Regular Army here.

Senator SUTHERLAND. It seems to me that the number of dentists you have is inadequate. How much do you think would be enough to adequately take care of the work?

General IRELAND. I am going to stick to the 177, because that is what the War Department allows. I have a promise from the War Department, however, which I stated before you came in, Senator Sutherland, that after we get oriented under the elimination bill if we find that we have not enough officers, I will be heard again.

Senator SUTHERLAND. I do not believe that one dentist can possibly take care properly of the mouths of a thousand officers and men.

General IRELAND. I know he can not.

Senator WADSWORTH. He has not a chance to do it.

General IRELAND. Not a single chance to do it.

Senator WADSWORTH. You are asking for 177 dental officers?

General IRELAND. One hundred and seventy-seven dental officers. and the surplus officers to be eliminated as provided in the War Department elimination bill.

Senator WADSWORTH. You now have 236?

General IRELAND. Yes; we have eliminated a certain number now. But there are at least 30 officers who will be absorbed by resignations and retirements, and the number is going down very rapidly.

Senator HITCHCOCK. Down to what?

Senator WADSWORTH. One hundred and seventy-seven. Now, I do not want to talk like a professional man, because I am not, but I will challenge the best 133 dental officers in the world to take care of that work. It can not be done. They could not even examine the teeth of those men.

General IRELAND. I will tell you very frankly that the dental profession want two dentists per thousand; and you know they will not complete the work then. The place of the dental surgeon in the medical profession in the group work is becoming more and more important every day.

Senator HITCHCOCK. That would make 800 dentists here in Washington city, at that rate, for a population of 400,000.

Senator SPENCER. No; it would be 8,000, would it not?

Senator JONES of Washington. When you started out with your officers and men they all had good teeth, did they not?

General IRELAND. No, sir.

Senator JONES of Washington. I supposed you did not take a man into the Army unless he had good teeth.

General IRELAND. We have a certain standard, you know; but you might say that there are very few men who enter the service who have perfect teeth. You know you do not find such men.

Senator SUTHERLAND. The men are subject to treatment. You compel the men to be treated?

General IRELAND. You know, all the men have to some extent to be treated.

Senator JONES of Washington. I thought you saw to it that a man had good teeth before you took him into the Army.

General IRELAND. We make certain that he has a certain number of teeth, and that a certain number of them are in apposition.

Senator JONES of Washington. But I understood that with men who to start in with have reasonably good teeth, a dentist could pretty well take care of a thousand of those men.

Senator SUTHERLAND. Some times when they look very good they are not good at all. Conditions develop after their enlistment which are anything but good.

General IRELAND. We could find examples of that right here and now?

Senator SUTHERLAND. Yes.

Senator SPENCER. This dental examination is made of the teeth of the men whether they want it or not?

General IRELAND. They make regular surveys of the men. Take it in a post; the dental officer, of course, treats the people who are sent to him from sick call in the morning; but periodically a dental survey is made of the entire command, so that they may find out the men who are not taking care of themselves.

Senator SPENCER. That is, by a dental survey you mean they go over the mouths of the men and actually examine them?

General IRELAND. Yes.

Senator SUTHERLAND. That is what the civil population is not doing, except that now in the schools to some extent they are requiring an oral examination of all pupils to see that they keep their mouths in condition.

General IRELAND. I think that one of the problems which is coming to this country is the periodical survey of all of us. We make it every year among the officers; but, of course, that can not be enforced with the civil population. A great many of the finest insurance companies in this country are urging their policyholders to have a physical survey made of them every so often at the expense of the insurance company.

Senator JONES of Washington. How often do you think that the soldiers' teeth should be examined carefully by the dental surgeon?

General IRELAND. I think that every soldier should be looked over once a year, easy. Now, that is outside of the work that comes up every day. That is outside of the day's work.

Senator HITCHCOCK. I think that sounds reasonable, and I should not think that would require many dentists.

Senator JONES of Washington. No; I should not think so.

Senator HITCHCOCK. I think the average man, of average intelligence, in a town like this goes to a dentist once a year, even if there is nothing the matter.

General IRELAND. I think that is true, but on the other hand, the great mass of the people of Washington, as well as those on the military posts, go to a dentist more than once a year. I think that is a perfectly fair statement.

Senator SUTHERLAND. In one of the counties of my State they have, by taxation, employed dentists to take care of the school children in the county, and they had a very remarkable instance when that flu epidemic was on. They did not have a single case of the flu among those children that were so treated. It was most remarkable.

Senator HITCHCOCK. I have an idea that it is of more importance for children than for adults. It is the same story as we have had elsewhere; we find that the Army is loading up with civilians. We have found that one-third of the Army is composed of civilians.

Senator WADSWORTH. On the other hand, to be completely fair, I think you should say there is a less percentage of civilians than you had before the war, so that it is not fair to say that we are being loaded up. It is being unloaded, if anything.

General IRELAND. If the Senator has a knowledge of the Surgeon General's office, he would understand how it is being unloaded.

VETERINARY CORPS.

Senator WADSWORTH. The only thing that ever persuaded me—I will speak very frankly—to give commissions in the Army to veterinarians and dental officers, was the astonishing results brought about by doing it, in the way of saving lives of men and also lives of animals, which had been lost by thousands because there was no system of protection practiced. Millions of horses and mules they used, and they died like flies.

Then, we organized a Veterinary Corps, and instantly the improvement began, and we saved five or six times as much as the salaries of the few veterinarians that we had. Every army in the world has a veterinary corps in the field, and in the British Army they raise the head of it to the rank of brigadier general; and if you could ever see the British transports with their horses as they were in France, why, they make everybody else look cheap in the condition of their horses.

General IRELAND. There is no question about it.

Senator WADSWORTH. Our horses died like flies. It was dreadful. We are just getting a Veterinary Corps established to take care of our animals. Now, it is proposed to kick the insides out of it. I can not see it.

General IRELAND. I think the best work done in France that I know anything about was the salvage work done by the medical corps of the British Army. It is the result of their experience in the South African War. Now, the veterinary service has been started in the American Army. We will do a lot better if you will just give us a show. We will make a return that will be satisfactory.

Senator WADSWORTH. Up to three or four years ago a horse or a mule in the United States Army was considered just a piece of machinery, to be used until it was worn out, and then thrown away, with no particular care given to it.

General IRELAND. There is no question about it. When they went into the field it is a fact that they were greatly neglected.

Senator SPENCER. You have 161 now. What was the War Department estimate for that?

General IRELAND. The War Department in their estimate on the elimination bill only gave 144, and that is one part of the elimination bill that I did not agree to.

Senator SPENCER. That you did not what?

General IRELAND. That I did not agree to.

Senator SPENCER. How many do you think we ought to have?

General IRELAND. I think we ought to have 175. I do not think they ought to be touched.

Senator WADSWORTH. You have 161?

General IRELAND. The difference is just the normal vacancies. We have not been able to get the men yet. We have been held down on account of the cut in the Army. Of course, they are fearful about holding examinations. We have held some examinations, but the last one I asked for was declined.

The veterinary service has a very important function besides taking care of animals. It is the professional inspection of our food supply. They say that they can take care of between 30,000 and 40,000

animals, and do food inspection, with 175 men, but I do not believe they can do it with a less number.

Senator HITCHCOCK. The House gave 109.

General IRELAND. Yes. I think that is perfectly ruinous to the Veterinary Service, and I think that the Veterinary Service will make a better return to the Government than any other service I know anything about. When we get through with the personnel I would like to say something about the retirement clause in this bill, as to how these officers are to be disposed of.

LIMITATION OF RETIREMENT FOR CERTAIN OFFICERS.

Senator WADSWORTH. You might proceed to that now.

General IRELAND. It is on the same page. Through that bill they say that the officers who are to be discharged shall be retired with their commissioned service only. Now, that is perfectly disastrous to most officers of the Medical Department.

Senator SPENCER. Where is this item you are talking about?

General IRELAND. It is on page 16. It goes all the way through. Senator. It starts on line 14, on page 16, with the words "one year's pay, or those of more than 10 years' commissioned service." Now, in the Medical Corps of the Army we will not suffer to a great extent with that proviso, but we do have quite a number of officers who had service as contract surgeons for a considerable period of time, and I think it would be fair to give them credit for that service. That was not provided for in the elimination bill. I have in mind several officers of the grade of captain who, if they should be eliminated under a drastic bill of this kind, would be put out with one year's pay. They had several years of satisfactory service as contract doctors.

In the Dental Corps Congress has given the dental surgeon credit on three different occasions, by three different acts of Congress for his service as contract surgeon and as acting dental surgeon, which should certainly be allowed him if he is to be retired.

Senator HITCHCOCK. How would the income of such a man under his contract service compare with that under his commissioned service?

General IRELAND. His compensation under contract was limited to \$150, by law, sir.

Senator HITCHCOCK. Then he was not earning as much as a contract surgeon as he finally secured when he got a commission?

General IRELAND. No, sir.

Senator HITCHCOCK. On what theory should he have credit for that time?

General IRELAND. He was giving service to the Government. He is not asking for credit for his contract service for promotion, but only for longevity pay and for retirement.

Senator WADSWORTH. They have had it for some time, by act of Congress.

Senator HITCHCOCK. That is not simply the commissioned service but the prior service to that.

General IRELAND. But in the dental service the question is altogether different, Senator. During this time that they were serving

as acting surgeons and dental surgeons and contract dental surgeons; there was no other dental corps for them to enter. As soon as the act of 1907 was passed, they did enter the Dental Corps and in the act of 1916 and in the act of 1920 they were given credit for the service as acting contract and contract dental surgeons.

Senator SPENCER. That is not for promotion?

General IRELAND. For longevity pay and retirement.

Senator SPENCER. A man in the contract medical service as a contract surgeon had that contract time computed in his promotion period, did he not?

General IRELAND. No, sir. There was a peculiar attitude with reference to contract surgeons ever since—

Senator SPENCER. There is something in that. A man must be five years in the service before he can be a captain.

Senator HITCHCOCK. Yes; but if a man is in the Medical Corps as a Regular Army officer four years and in the medical service as a contract surgeon for one year, does not that make up the five years?

General IRELAND. No, sir; it has not a thing to do with it.

Senator SPENCER. He must have that five years in the Medical Corps?

General IRELAND. He must be in the medical service. There has been an act ever since 1867 which gave credit for the volunteer service, to the captaincy, but not to seniority, in the medical service. The medical service, since April, 1917, will count for the captaincy.

Senator SPENCER. How does a man enter the medical service if he does not enter the Medical Corps of the Army?

General IRELAND. That is the way we have it now.

Senator HITCHCOCK. He does not get credit for his contract service. He does not get credit until he gets a commission.

Senator HARRIS. Did you say that the dental surgeon and the veterinary had the benefit, did get credit for retirement or longevity pay for the time that they served under contract?

General IRELAND. The dental surgeon gets credit for the time that he served as an acting dental surgeon or a contract dental surgeon. That has been repeated by an act of Congress on three different occasions.

Senator HARRIS. But in the medical service you say they do not?

General IRELAND. They do not.

Senator HARRIS. Why is that discrimination?

General IRELAND. I do not know, sir; but the opinion of the Judge Advocate General, which has been approved invariably by the Secretary of War since the Civil War, has been to the effect that they were civilians only.

Senator JONES of Washington. What is the active pay of a colonel?

General IRELAND. \$5,000.

Senator HITCHCOCK. You have got something less than one-tenth, in the Medical Corps, of all the officers in the Army, have you not? At the present time there are 1,137?

General IRELAND. There are 1,137.

Senator HITCHCOCK. A little less than 10 per cent?

General IRELAND. Yes. If that is sufficient about the dental service, that is all, Mr. Chairman.

Senator HITCHCOCK. You make the point that you think that when they retire they should take into account not only their commissioned service but their contract service in addition?

General IRELAND. Yes, sir; that privilege has been given to members of the Dental Corps on three different occasions by acts of Congress. The act of 1911, the act of 1916, and the act of 1920.

Senator HITCHCOCK. Was that in the matter of retirement?

General IRELAND. If I may get the bill, I will do so. It served to give them position, longevity pay—I am now talking about the Dental Corps. The case of the dental surgeon is perfectly clear except that contract service has been left out of this bill.

Senator HITCHCOCK. It applies to all officers, does it not, not only your department but in others?

General IRELAND. Yes; it applies to all officers.

Senator HITCHCOCK. It is all limited to the commissioned service?

General IRELAND. Yes.

Senator HITCHCOCK. So that if a man had served five years as a private and had been made a noncommissioned officer and finally an officer he would not get any credit for the time he served without a commission?

General IRELAND. Not under this bill; but under the law as it stands today, regardless of this bill, he does. There are plenty of officers of the Medical Administrative Corps that came in in the summer of 1920 who are drawing four fogies.

Senator HARRIS. If a man served as a contract surgeon in the Philippines, for instance, he gets no credit for that, although he served by the side of an officer of the corps?

General IRELAND. That is correct, sir. May I state right here that I presented the case to the War Department last fall, that I believed that the officer who served as a contract surgeon should have credit for longevity pay and retirement for that service. The War Department agreed to the proposition, but said there were so many things demanding attention just now that they did not believe it was an opportune time to present it to Congress; but the War Department has agreed to the proposition. Now, Senator, the veterinary officer is not given credit in this bill if he is retired or eliminated, as he was in the 1916 and 1920 bills. Those bills provided that he should be given credit for all Government service as a veterinarian. Many of those officers had been in the corps for many years, employed as veterinarians to artillery and cavalry in the field and in the Quartermaster's Department. They were given credit for promotion for that service. But that is all abolished by this bill as drawn, and with the result, for instance, that after many years' service, a man would be put out with one year's pay.

Senator HITCHCOCK. Do you understand, Mr. Chairman, that in the Regular Army Service if a private has served five years and has been made a noncommissioned officer and then has had a commission for, say, five or ten years more, that he would not under this provision get credit for his service as a private?

Senator WADSWORTH. I did not hear your statement, Senator.

Senator HITCHCOCK. Under this provision for retiring officers and reducing the Army, suppose that a man has come in through promotion from a private; does he get credit for the time that he served as a private?

Senator WADSWORTH. No; it is only his commissioned service that he gets credit for.

Senator HITCHCOCK. That is a parallel case to that of the contract surgeon, is it not?

Senator WADSWORTH. Well, hardly.

Senator SPENCER. He serves as a soldier. Here this man served in precisely the same place and under the same circumstances that he serves with later as an officer; precisely the same thing, with no change of duties. But the enlisted man comes up from the enlistment and gets a commission. The other man simply changes from a contract to a commissioned rank, but his work is precisely the same.

Senator HITCHCOCK. For longevity pay they do not get credit for that?

Senator WADSWORTH. No.

General IRELAND. Is that sufficient about the veterinary service?

Senator WADSWORTH. I think so.

General IRELAND. I would like to draw attention to this administrative corps. This bill eliminates many of those officers, and it gives them credit only for their commissioned service. That is the only corps in the United States Army that is made up of former enlisted men.

Senator WADSWORTH. Of former enlisted men?

General IRELAND. Of former enlisted men. Every one of them is a former enlisted man, a private or a noncommissioned officer.

Under this bill they will be eliminated with commissioned service only. In other words, they will all go out with one year's pay. No officer in the administrative corps can receive more than that, because they received their commissions dated July 1, 1920. Now, those officers of the administrative corps in the grade of captain average well over 17 years' service in the Army. Those in the grade of first lieutenant average well over 15 years' service in the Army, and those in the grade of second lieutenant will average over 12 years' service in the Army.

In the reduction of the Army these old noncommissioned officers have no place to go. Under the law passed at the beginning of the war if they accepted a commission in the volunteer service they were assured their former positions in the Army; but if the Army is to be cut down, there is no position for them to go back to, and they have lost that right. If they are to be eliminated, they certainly should be given credit in their elimination for their enlisted service. That credit was given in the retirement of officers and has been ever since the organization of the Army.

Senator WADSWORTH. For retirement?

General IRELAND. Yes.

Senator WADSWORTH. Not for longevity pay?

General IRELAND. Certainly; for longevity pay. There are officers of the administrative corps drawing full pay, of the grade of captain, to-day.

Senator SUTHERLAND. They should have credit for their noncommissioned service.

General IRELAND. And enlisted service; yes.

Senator SPENCER. Are they commissioned?

General IRELAND. They are commissioned in the administrative corps, but this bill would eliminate them with only their commissioned service to their credit.

Senator SUTHERLAND. That does not seem fair.

General IRELAND. No; it is very unfair. Of course, it would have been very much better if they had never been commissioned and had received their enlisted retirement.

Senator HARRIS. No men ever did better service than those men did in France training those men.

General IRELAND. Oh, they did splendid service. I had a man there who was with me from 1912 until I left France; I think one of the finest men I ever knew anywhere. I think he would complete his 30 years' service just about now, and he would be eliminated by this bill with his commissioned service.

Senator WADSWORTH. He has only been commissioned for two years?

General IRELAND. Less than two years. In speaking of the commissioned service in the administrative corps, this bill, of course, would give them credit for any commissioned service they might have had during the war. That is to be taken into consideration.

Senator WADSWORTH. None of them would have 10 years.

General IRELAND. There is not one of them that could be retired under this bill.

Senator WADSWORTH. Not one.

General IRELAND. It would be impossible.

Senator WADSWORTH. The war was only three years long, and he was commissioned only two years, and the bill says he shall not be retired with less than 10 years. That is pretty rough treatment for those men who have served as soldiers for so long. Is there anything else, General?

General IRELAND. I have nothing else to say on that, but it has reached a point where we can not live with what this bill gives us. We are not asking for luxuries; but during this wave of economy we would like to have enough personnel to live, and we will try to get along with what is given us.

Now, Senator, the next item is the appropriations of the Medical and Hospital departments, and a million dollars is allowed in this bill and that is just a mass of figures. It is on page 55 of the bill. It can be handled much better by the officer who has worked with it for the last half a dozen years, and with your permission I would like to have Colonel Wolfe take that matter up.

Senator WADSWORTH. Very well.

STATEMENT OF COL. EDWIN P. WOLFE, BUDGET OFFICER.

Colonel WOLFE. Mr. Chairman, referring to General Ireland's testimony as to the credit for service of the dental and veterinary officers, I find it in the general Army reorganization act of June 14, 1920, and it reads as follows:

To officers of the Dental Corps shall be credited their service as contract dental surgeons and acting dental surgeons and to officers of the Veterinary Corps their governmental veterinary service prior to June 3, 1916.

General IRELAND. May I make one point right there?

Senator WADSWORTH. Certainly.

General IRELAND. In providing for the veterinary officer it should be provided that he should have credit for all service now recognized for promotion. There was a class of veterinary officers prior to 1916—those who served in the Artillery, those who served with the Cavalry, and then the contract veterinary who served in the quartermaster's department. The Comptroller of the Treasury has just decided that the veterinary who served in the quartermaster's department can not count his service for retirement, but if the bill should read "all veterinary service now counted for promotion" it will take them all in.

Senator HARRIS. Mr. Chairman, I would like to state to the committee just how this works about one boy in the service. He volunteered with the First Tennessee Regiment. They were the first volunteers that went to the Philippines. He was then a contract surgeon. Now he does not get any credit for that service for longevity pay. He is now in the service—one of the best officers in the service. But the man who is a contract surgeon in the Veterinary Corps or in the Dental Corps, who was not in the Philippine war at all, he gets credit for that work, and I do not think it is right, and I hope that the committee will correct it. There are only a few of them.

Senator WADSWORTH. Proceed, Colonel.

Colonel WOLFE. I believe Senator Hitchcock asked about an appropriation and the money for contract surgeons. You will find on page 267 of the hearings before House committee a full list of the contract surgeons and the amount appropriated for 1922 is \$56,801. The amount expended will be somewhat less than that sum.

MEDICAL AND HOSPITAL DEPARTMENT.

The appropriations for medical and hospital department you will find on pages 54 and 55. That is intended to furnish practically all the requirements of the medical service in the way of supplies and special services.

In our preliminary correspondence with the director of the budget before the inclusion of the sum of \$1,215,000, we were originally allotted for consideration \$1,345,000. That was later reduced, as I understand it, in the War Department, to \$1,265,000, and the bureau of the budget still further reduced it to \$1,215,000.

For the current fiscal year there was appropriated for this purpose \$2,000,000.

As an evidence of our efforts to cooperate with the President in his effort to enforce economy, we gave up, as a saving, \$150,000, and placed \$250,000 in reserve to be called on if necessary. Of that sum we have had a call for \$50,000, leaving the net available sum for use for the current year of \$1,650,000.

Senator WADSWORTH. That you think you will spend?

Colonel WOLFE. We will have to spend all of it before the end of the year; yes, sir.

Our financial statement is tied up with some other things, and I will just refer to it briefly. It shows that we have received by refundment from the Veterans' Bureau, for the care of their beneficiaries at their hospitals, \$203,240. There is now due us \$151,000 more.

Our net obligation to date—that is to the end of March, 1922, was \$1,765,897, with three months yet to go.

Taking into account the refundment yet to come in to the appropriation for the care of veteran patients, we will be able to carry on our work this year within the sum allotted.

CAUSES OF INCREASE IN NUMBER OF PATIENTS.

The number of patients in our hospitals has increased very materially since the first of the year. We are approaching a period when the number will begin to decline again, somewhat.

Senator WADSWORTH. Will you state the cause of that increase. Colonel?

Colonel WOLFE. Generally, the respiratory diseases because of close housing, and the seasonal influenza epidemics which have passed over the country.

In the statement which appears in the Book of Estimates, on page 123, I have endeavored to list or classify the different purposes for which the sums would be expended, and on the basis of \$1,265,000, the sum which would be available for each particular purpose.

Of this sum there is approximately \$555,000 estimated for the pay of civilian employees. The number of civilian employees to-day is 1,208. Our pay roll for February—because the March returns are not all in yet—gave us an annual expenditure of \$924,000.

On July 1 last the expenditures for this purpose was on the basis of \$1,335,000.

So that you see we have reduced our expenditures along the whole line something like \$410,000. We believe that we have reached practically the bottom of our possible reduction to carry on, provided \$1,265,000 instead of \$1,215,000 is appropriated, and taking into full account everything that will be returned to us from the appropriation for the Veterans' Bureau, by refundments for the care of their patients. In checking up the amount of supplies which our records indicate, the standard items alone that we will have to purchase next year, the aggregate amount is \$320,000 for standard items, to say nothing of the miscellaneous requirements in individual cases in the big hospitals. The amount which appears on page 123, that I referred to before, is \$240,000; or, taking off the \$50,000 it is \$190,000 that will be available. So that we will find it, even if \$1,265,000 is appropriated, very difficult to carry on the activities which we are required to carry on, forgetting that the strength of the Army as it appears in this act is, officers and men, 132,000.

Senator JONES of Washington. The House has given you \$1,000,000. What is the minimum you can get along with?

Colonel WOLFE. The minimum we can carry on our functions with would be \$1,265,000.

USE OF RESERVE STOCK.

Senator WADSWORTH. The Budget estimate is \$1,215,000.

Colonel WOLFE. I understand that, sir; but I am telling you what we stated to them: and they took off that \$50,000 on the assumption that we could supply \$50,000 from reserve stock. But out of such reserve stock as we have on hand we are not going to buy anything. The things that we are going to buy we do not have in stock and can not carry in stock for any length of time, because of their perishable nature; and we have to purchase them practically as they are

required. We could not carry more than a six months' stock at any time.

Senator HARRIS. How much is required for "supplies for teaching the art of cooking to the enlisted force," and how much is expended on that?

Colonel WOLFE. There is practically nothing expended on that item, so far as I know. Whatever is used is used out of the stock on hand in the kitchen. I have never had occasion to have recourse to that appropriation at any time in my experience as post surgeon.

CARE AND TREATMENT OF PERSONNEL OF ARMY ON DETACHED DUTY.

There is another item that I wish to call your attention to, and that is the expense incident to furnishing medical care and treatment, including hospitalization for the personnel of the Army on detached service who are not at places where the regular facilities of the medical department are available. These men on duty with the detached units, such as the Reserve Officers' Training Corps units, on duty at recruiting stations, on duty with the reserves. During the year 1921 we expended for that purpose \$81,445. You understand that under the provision of law and regulations these people have authority to call upon a civilian practitioner in cases of illness whenever and wherever they are not where they can go to a military medical officer or institution; and we find that the fees are rather high, and the sum amounts to a good deal in a year, as I have indicated. So far this year the expenditures for that purpose have amounted to about \$21,000; that is to say, the bills which have come in. We are just examining and settling bills for a period as far back as 1918, so that you will understand that the bills which we have received so far and which we will have received by the end of June will not necessarily cover all the obligations which were incurred during this year, and we may not get all the bills in until after the lapse of two or three years.

Senator WADSWORTH. Old accounts?

Colonel WOLFE. Yes. In fact, I had pass over my desk only a few days ago an account as far back as 1919. But accounts of that character, of course, become certified claims and are subsequently submitted to Congress for appropriation of the money to cover them.

In the administration of the money which Congress has given us for this purpose, I believe I am safe in saying we have made every effort this year to limit our expenditures to that which is absolutely needed, and as I have intimated to you, in spite of all that we will have expended for all purposes before the end of the year something over \$2,000,000.

MEDICAL AND SURGICAL HISTORY OF WORLD WAR.

Senator WADSWORTH. I see, beginning in line 19 on page 55, the following provision:

Provided, That no part of this appropriation shall be used for payment of any expense connected with the publication of the medical and surgical history of the World War.

Colonel WOLFE. Yes.

Senator WADSWORTH. What is there about that that is of interest?

Colonel WOLFE. That brings up a situation previously discussed, the question of the publication of the medical and surgical history of the World War, and I have submitted to the clerk of the committee, Senator, suggestions and a statement of our needs to cover the situation.

May I ask, if you care to have it, that it be included in this hearing?

Senator WADSWORTH. You might put it in at this point.

(The statement referred to is here printed in the record, as follows:)

WAR DEPARTMENT,
OFFICE OF THE SURGEON GENERAL,
Washington, April 11, 1922.

Memorandum for: The Chief of Finance.

Subject: Medical and surgical history of the war with Germany.

1. Pursuant to your request for a statement of the intent of the hearings of the Medical Department before the Senate Appropriations Committee with regard to the need of the fiscal year 1923, the following is submitted:

(a) There has been obligated or expended out of the appropriation for the fiscal year 1921 approximately-----	\$50,000.00
For the fiscal year 1922 approximately-----	1,000.00
(b) There will have been expended by June 30, 1922, for civilian employees in the preparation of the history-----	53,436.03
(c) There will be needed for civilian employees during the fiscal year 1923-----	\$16,600
For printing and binding what is left of the 1922 appropriation-----	49,000
	<hr/> 65,600.00
(d) Total needs to the end of the fiscal year 1923-----	170,036.03

2. To accomplish this the following will be necessary:

(a) Increase the limit of expenditures.

(b) Make the appropriation for the fiscal years 1921 and 1922 available until June 30, 1923.

(c) Appropriate \$16,600 for civilian employees for the fiscal year 1923.

3. This may be effected by the following changes in the text of H. R. 10871.

Page 55:

* * * *Provided*, That not more than \$16,600 shall be used for payment of civilian employees for the preparation for publication of the medical and surgical history of the war with Germany.

Page 111:

Toward the preparation for publication under the direction of the Secretary of War, of a medical and surgical history of the war with Germany, and the printing and binding at the Government Printing Office and the necessary engravings and illustrations, ~~\$4,600~~ \$100: *Provided*, That the total cost of such history shall not exceed ~~\$150,000~~ \$225,000: *And provided further*, That any unexpended portion of the appropriation for the fiscal years 1921 and 1922 shall be available for obligation until June 30, 1923.

Page 55:

Make no change in the proviso in lines 22 to 24, inclusive. Strike out the words "World War" and insert "war with Germany."

Page 111:

Toward the preparation for publication, under the direction of the Secretary of War, of a medical and surgical history of the war with Germany, including the services of an editor and such other civilian employees as may be necessary, and printing and binding at the Government Printing Office and the necessary engravings and illustrations, \$16,600: *Provided*, That the total cost of such history shall not exceed ~~\$150,000~~ \$225,000: *And provided further*, That any unexpended portion of the appropriation for the fiscal years 1921 and 1922 shall be available until June 30, 1923.

Page 55:

Strike out the entire proviso included in lines 22 to 25, inclusive.

Page 111:

Toward the preparation for publication under the direction of the Secretary of War of a medical and surgical history of the war with Germany, and printing and binding

at the Government Printing Office, and the necessary engravings and illustrations, \$4,800 \$100: *Provided*, That the total cost of such history shall not exceed \$150,000 \$225,000: *And provided further*, That any unexpended portion of the appropriation for the fiscal years 1921 and 1922 shall be available for obligation until June 30, 1923.

Page 55:

Make no change in the proviso in lines 22 to 24, inclusive. Strike out the words "World War" and insert "war with Germany."

Page 111:

"Toward the preparation for publication, under the direction of the Secretary of War, of a medical and surgical history of the war with Germany, including the services of an editor and such other civilian employees as may be necessary, and printing and binding at the Government Printing Office and the necessary engravings and illustrations, \$18,600: *Provided*, That the proviso in previous acts limiting the cost of the history to \$150,000 is hereby repealed. A report of expenditures made under this appropriation during the preceding fiscal year shall be included in the annual estimates of appropriations submitted to Congress at the beginning of each regular session thereof: *And provided further*, That any unexpended portion of the appropriation for the fiscal years 1921 and 1922 shall be available for obligation until June 30, 1923."

NUMBER OF VETERANS' BUREAU PATIENTS CARED FOR.

Senator SUTHERLAND. How many Veterans' Bureau patients have you now under your care?

Colonel WOLFE. The number has fluctuated somewhat, but the average during the eight months I spoke of was 1,380. It started in with about 600, and the number has run up continually until it reached 1,850.

Senator SUTHERLAND. It is about that number now?

Colonel WOLFE. Yes, sir. We have offered to provide facilities for 3,000.

Senator SUTHERLAND. They expect to reach that figure?

Colonel WOLFE. Yes, sir; ultimately.

Senator SUTHERLAND. That is in widely scattered hospitals?

Colonel WOLFE. That is in the five hospitals which General Ireland mentioned a short time ago, and at certain military posts—for example, Jefferson Barracks. At that barracks there are being treated a considerable number of what we call maxillo-facial cases, men who had their faces very badly disfigured; Doctor Blair, of St. Louis, is making a specialty of such cases and is treating them in this hospital, but we are actually furnishing the hospital care and treatment and supplies, and everything necessary. They drift in from time to time and at almost any station. We have had them at Camp Dix and we have had them at Camp Knox, I think. One or two or three come in there and stay there until either they are relieved of current acute disability or they are transferred by the Veterans' Bureau to some other hospital.

Senator SUTHERLAND. You do not get many chronic cases of long standing, do you?

Colonel WOLFE. They go usually to the big hospitals.

Senator SUTHERLAND. To Public Health hospitals?

Colonel WOLFE. No, sir; I mean to the general hospitals; these long-standing cases usually go to our large hospitals. Our large hospitals are treating the same class of cases that the Public Health hospitals are treating. For example, all the tuberculosis cases we are treating are being treated at Fitzsimons—practically all of them,

I should say. I will correct that by saying that a considerable number are being treated at Fort Sam Houston, and there are a few treated at Beaumont. We have cases of neuropsychiatry and a large number of general medical and surgical cases.

At Walter Reed we have practically all remaining amputation cases and chronic bone diseases which are still requiring attention—that is, I will not say all of them, but a large number of them are still requiring treatment. In fact, some of them have been there since 1919.

Senator WADSWORTH. You were speaking of the management of these hospitals and their distribution. I think it is not improper for me in this connection to refer to some testimony that we had yesterday in connection with the soldiers' home business.

Colonel WOLFE. Yes.

REQUIRED PERSONNEL FOR 200-BED HOSPITAL.

Senator WADSWORTH. General Wood showed this committee a statement or estimate prepared by a joint committee of the medical authorities of the Government—I think the Surgeon General of the Army was a member of it, and General Wood himself was a member, and the Surgeon General of the Navy, perhaps, Brigadier General Sawyer, and Colonel Forbes—and the statement was to the effect that in the care of these disabled ex-service men, for a 200-bed hospital a personnel of 189 would be needed.

Colonel WOLFE. I think that is very nearly correct, sir.

Senator WADSWORTH. Do you have that ratio in your hospitals?

Colonel WOLFE. I have not figured it out for each individual hospital or for the hospitals as a whole. The number of personnel of all classes operating the hospital at Walter Reed, as you will find inserted on page 966 of the House hearings, gives 1.130 for each patient; that is one and one-eighth employees. I would say that this is below the average for civilian hospitals.

Senator WADSWORTH. Yes; but even at Walter Reed I imagine that the character of the cases there would make a difference, their great diversity and the necessity for much more constant care than would be the case in an ordinary public hospital.

Colonel WOLFE. They are very much the same kind of cases that the Public Health has.

Senator WADSWORTH. For example, at Walter Reed you have a large number of surgical cases still undergoing treatment that are not discharged.

Colonel WOLFE. No, sir; they have all been discharged except the officers.

Senator WADSWORTH. There are quite a number of them?

Colonel WOLFE. Yes.

General IRELAND. Forty, to-day.

Colonel WOLFE. I believe it will not average that much, taking it at all the hospitals. It is that high at Walter Reed, but going down to Fitzsimons it will fall lower than that.

Senator WADSWORTH. What would be the personnel at the Fitzsimons Hospital?

Colonel WOLFE. I am sorry that I have not the data here, but I will furnish it to you.

Senator WADSWORTH. Can you remember what it is approximately?

Colonel WOLFE. I can give you the number of patients. I have that here. On March 4 they had 1,105.

Senator WADSWORTH. One thousand one hundred and five patients?

Colonel WOLFE. Yes. I have not the personnel with me at the present time.

Senator WADSWORTH. I do not believe you have a personnel of 1,100 there, have you?

Colonel WOLFE. I would have to guess at that. I will be glad to furnish that to you. I have it at the office. I am quite sure it is less than that. By personnel I mean everybody that is on duty at the hospital, running the heating plant and the facilities, and looking after the garbage and police work, and everything that is necessary to keep a hospital in operation.

Senator WADSWORTH. It is fair to say that General Wood thought that no such number as 189 to 200 was necessary, and the soldiers' homes maintain hospitals now comparable with every other kind of hospitals. They are inspected by the Inspector General of the Army, and in his report in some instances that I know of he says that they are the finest institutions he has ever inspected in or out of the Army; and as I recall yesterday's testimony, General Wood said that they nowhere approached the ratio of 189 to 200.

Senator HARRIS. He said that there was not need of above half that number.

Senator WADSWORTH. Yes; he said something about half.

General IRELAND. Senator, there is a fallacy in that, if you will observe. Every patient in the Walter Reed Hospital is a sick man and is constantly being cared for. In the National soldiers' homes there are many custodial cases.

Senator WADSWORTH. Oh, yes. I am not criticizing Walter Reed, because those are acute cases there. But the report of this committee, as I understand it, stated that that was the basis which should be adhered to by the Public Health Service hospitals, many of whose patients are custodial, and General Wood refused to join in that report. He thought that the number was excessive. I do not say that it is excessive for Walter Reed, where every man is an acute case; but they have a tremendous variety of cases, and I would like to get the number at Fitzsimons, where they are not all acute cases, as many of them are tuberculosis cases, and perhaps a large percentage of them are walking about.

Colonel WOLFE. I will be glad to furnish that to you for all the hospitals, for each individually.

Senator WADSWORTH. I think that would be a good plan.

Senator HARRIS. I think we ought to have that, and the number of patients.

Colonel WOLFE. I will give you a complete statement.

Senator WADSWORTH. Yes; and give a statement showing the type of patients taken in the hospitals, because, of course, the force in the hospitals must vary.

Patients and personnel in general hospitals in the United States as of April 1, 1922.

General hospitals.	Person- nel.	Normal bed capacity.	Total patients.	Person- nel per bed.	Person- nel per patient.
Army and Navy General Hospital.....	196	280	183	0.744	1.016
William Beaumont General Hospital.....	333	1,400	289	.875	1.132
Fitzsimons General Hospital.....	* 1,056	* 1,700	1,157	.788	.812
Fort Sam Houston (station hospital).....	408	650	613	.68	.665
Letterman General Hospital.....	* 610	750	536	.813	1.138
Walter Reed General Hospital.....	1,327	1,500	1,002	.886	1.324

* William Beaumont General Hospital would require approximately 17 additional persons (8 nurses and 9 civilian employees) if operated at capacity.

* Includes 45 laundry operatives.

* The present personnel at Fitzsimons General Hospital is sufficient to care for 1,340 patients. If operated at full bed capacity, would require a proportionate increase in personnel.

* Includes 29 laundry operatives.

NOTE.—Laundries not operated at the other hospitals. Laundry service for them is rendered by civilian laundries under contract or by Government operated laundries.

The following classification of beneficiaries of the Veterans' Bureau serves to illustrate the number and type of cases at Army general hospitals on March 30, 1922. It is safe to assume that the same relative proportion applies to all patients treated in Army hospitals other than beneficiaries of the Veterans' Bureau.

At least 75 per cent of the cases in all hospitals, including tuberculosis hospitals, are bed patients and require attendance. Some of the general surgical cases, of course, require more attendance than those tuberculosis cases which are confined to bed.

Hospital.	Beds assigned to benefici- aries Veterans' Bureau.	Patients in hospital.			Total cases under treatment.	Vacant beds, benefici- aries Veterans' Bureau.
		Tubercu- losis.	Neuropsy- chiatric.	General medical and surgical.		
Army and Navy.....	150	2	3	100	105	67
Beaumont.....	200	66	21	19	106	104
Fitzsimons.....	1,229	770	.....	57	827	371
Letterman.....	250	4	19	120	143	210
Fort Sam Houston.....	300	136	20	55	211	80
Walter Reed.....	750	33	37	314	384	366
Total.....	2,879	1,011	100	665	1,776	1,207

Colonel WOLFE. Also there is another thing, that in caring for the patients, for instance, where they contemplate educational work, this vocational and therapeutic treatment, it has been carried on in addition to the nursing activities.

Senator WADSWORTH. Yes.

Colonel WOLFE. And that, of course, serves to bring the number up.

Senator WADSWORTH. I think there were four occupational aids in that estimate, and a few others under a similar heading. We found a good deal of difficulty in finding out what they really did, especially in the matter of vocational training.

Colonel WOLFE. I think that is all I have on this particular phase of the bill.

MEDICAL AND SURGICAL HISTORY OF WORLD WAR.

Senator JONES of Washington. Colonel, I wanted to ask you about this history of the World War. I see in this proviso it says that no part of this appropriation shall be used for payment of any expense connected with the publication of this Medical and Surgical History of the World War. Is there any other provision made in the bill in regard to that?

Colonel WOLFE. If you will refer to page 110, I think you will find the other provision.

Senator JONES of Washington. That takes care of it, then, adequately?

Colonel WOLFE. Yes, sir; I will not say adequately, but it is a case where the appropriation is made for the purpose of carrying on the work.

If you do not care for anything more on that there is one more feature in the bill I would like to speak of, sir.

Senator WADSWORTH. Very well.

RESTRICTION ON PROCUREMENT OF SUPPLIES.

Colonel WOLFE. Page 102, lines 10 to 18, inclusive, more particularly the part in lines 15, 16, 17, and 18. I am rather at a loss to know just what was contemplated by the insertion of that proviso. If it means that I have to estimate what it would cost the Government to manufacture the acetanilide and phenacetin and all those things which I am buying before I go out and buy them, I am in a hopeless position.

Senator WADSWORTH. Has this been in before?

Colonel WOLFE. Not that language.

Major BROWNE. It has been in the fortification appropriation act.

Colonel WOLFE. If this is made applicable to the procurement of supplies as it relates to the Medical Department I will just have to throw up my hands and quit, because no branch of the Government makes practically anything we use. If there was any branch of the Government making making it we could determine what would be a 25 per cent increase in cost, but if I should estimate at what the Government could make it it would be about 50 per cent more than I could go out and buy it for.

Senator SUTHERLAND. Maybe more than that.

Colonel WOLFE. Yes, sir.

Senator HARRIS. Do you want the whole paragraph taken out or certain parts of it?

Colonel WOLFE. Strike out the rest of the paragraph beginning at the word "or" on line 15, and it will not interfere with the Medical Department.

Senator HARRIS. From there on to the end?

Colonel WOLFE. If it is not intended to be of general application it ought to state so.

Senator WADSWORTH. Well, that second part of the paragraph would affect other branches than the Medical Corps.

Colonel WOLFE. Yes, sir; the Quartermaster and the Signal Corps.

Senator WADSWORTH. The Quartermaster could not buy a bushel of oats until he had ascertained how much it would cost the Government to raise that bushel.

Major BROWNE. I would like to point out one other thing in connection with this paragraph that Colonel Wolfe has referred to. On

page 103, lines 1 to 7, is another paragraph which provides that no part of the moneys appropriated in this act shall be available for the purchase of any article which can be manufactured or produced for any sum less than it can be purchased or procured otherwise. That seems to conflict with the item on page 102 that Colonel Wolfe has just referred to, where the limit is placed at 25 per cent in excess of the cost of production. Those two paragraphs were both carried in the last fortification appropriation act and have simply been incorporated in this act.

Senator WADSWORTH. They were conflicting in the fortification act, were they not?

Major BROWNE. They were conflicting, I should say.

Senator WADSWORTH. What happened?

Major BROWNE. It was intended only to apply to ordnance manufacture.

Senator WADSWORTH. In one case it puts a limit of 25 per cent excess and in the next paragraph says there shall not be any excess.

Major BROWNE. I do not think there has been any particular effect of it. The Ordnance Department suggested in a letter the omission of the paragraph on page 103.

Senator WADSWORTH. I notice a paragraph on the bottom of page 102 that has nothing to do with the Medical Corps or Medical Department:

Expenditures for carrying out the provisions of this act shall not be made in such manner as to prevent the operation of the Government arsenals at their most economical rate of production, except when a special exigency requires the operation of a portion of an arsenal's equipment at a different rate.

Suppose the expenditures are so low that you haven't got money enough to operate them economically, then what happens?

Colonel WOLFE. Speed up, I suppose, sir.

Major BROWNE. That has been carried for several years in the fortifications appropriation act.

Senator WADSWORTH. Yes; but we did not have the situation until this year, when the arsenals in very large part must be closed down under the appropriations contained in this bill, and how can you operate an arsenal economically if you close it down?

Major BROWNE. I do not know.

Senator WADSWORTH. That, I believe, does not mean anything except when a special exigency requires the operation of a portion of an arsenal's equipment at a different rate.

Colonel WOLFE. General Peirce of the Ordnance himself could not understand what was meant by it.

Senator WADSWORTH. I suppose my question is No. 999 of useless questions.

MEDICAL AND HOSPITAL DEPARTMENT.

Colonel WOLFE. Senator, may I revert back to the appropriation for Medical and Hospital Department? In making the estimates in various parts of the bill reference is made to the enlisted strength of the Army as a basis. The Medical Department out of this appropriation has to care for the enlisted personnel and their families, if on military stations or reservations, officers and their families, retired officers and enlisted men if they call for treatment, the per-

sonnel at the Student Officers' Training Corps camps, the Reserve Officers' training camps, the civilian military training camps, and the nurses. Therefore, with a force of 150,000 enlisted men, we are obliged to provide for 182,000 men, to say the least.

Senator WADSWORTH. Persons?

Colonel WOLFE. Persons; yes.

Senator WADSWORTH. Is that your estimate, about 32,000 over and above the enlisted strength of the Army?

Colonel WOLFE. For officers, enlisted men, and nurses, the number of people who are expected to attend these camps, scouts and all, on a basis of 150,000 enlisted men, would be 182,000—32,000 more. I have the figures in detail if you would care to have them.

Senator WADSWORTH. You might give us them.

Colonel WOLFE. During the period 1910 to 1916, inclusive, the appropriations for the Medical Department, when it was not charged with the Veterinary Service, when the Dental Service was in its infancy, and when the number of officers and enlisted men on detached service was small it averaged \$8.53 per capita. The minimum during that period was \$7.52 and the maximum \$9.30. A review of the letter of instructions from The Adjutant General, dated July 16, 1921, for the preparation of the estimates for the fiscal year 1923, and a supplementary letter of August 3, 1921, indicates that the approximate number of personnel for whom medical supplies and services may be required will be 182,897—15,000 officers, 150,000 enlisted men, 750 nurses, 7,880 Philippine Scouts; a sufficient number of reserve officers in training for 15 days to equal an annual complement of 1,265; members of the R. O. T. C. in training camps to equal an annual complement of 2,250; members of the enlisted Reserve Corps to equal an annual complement of 1,460; members of civilian military training camps to equal an annual complement of 2,500; and officers and enlisted men on the retired list entitled to treatment and who will avail themselves of such privilege, 1,972. If this number be scaled down to 181,000 the allotment of \$1,265,000 would provide a per capita allowance of only \$6.99; and an appropriation of \$1,215,000—\$1,265,000, less \$50,000—only \$6.71.

(Whereupon, at 4.30 o'clock p. m., the committee recessed until Wednesday morning, April 12, 1922, at 10.30 o'clock.)

WAR DEPARTMENT APPROPRIATION BILL, 1923.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

WEDNESDAY, APRIL 12, 1922.

The subcommittee met at 10.30 o'clock a. m.

Present: Senators Spencer (chairman), Sutherland, Lenroot, and Harris.

AIR SERVICE.

STATEMENT OF MAJ. GEN. MASON M. PATRICK, UNITED STATES ARMY, CHIEF OF THE AIR SERVICE.

The CHAIRMAN (Senator Spencer). General, if you will be good enough to tell us where you think the provisions of the bill are unsatisfactory and give us the reasons, that will be very helpful. There is no need of saying anything about those provisions of the bill that seem to you satisfactory.

General PATRICK. This bill making appropriations for the Air Service, as passed by the House of Representatives, decreased the total sum authorized by the Budget officer, \$15,000,000, by \$2,569,000. Such a decrease very seriously handicaps the Air Service in attempting to carry out its mission. I do not know upon what theory the reductions were made. I can point out very readily the items which were reduced.

CIVILIAN EMPLOYEES.

The estimate for civilian employees, as submitted with the authority of the War Department and the Budget officer, was \$3,010,730. The House bill allows only \$2,750,000. I am struggling with an immense accumulation of surplus property left over after the war. I am trying to concentrate it; I am trying to get it in fewer places in order to save money. It is scattered now the country over. If I am allowed to do so, I can bring it into a very much smaller number of depots and I can dispose of a great deal of it.

The sale of the property is more than paying the expenses of relieving the Government of its care. Without the civilian employees, who are really doing this work, I can not accomplish this economic result. Therefore, by cutting down the appropriation from the

\$3,010,730 that I estimated to the total of only \$2,750,000 I can not do it.

Senator SPENCER. Do you remember what that estimate was?

General PATRICK. \$3,010,730.

Senator HARRIS. You are obliged to have \$3,000,000?

General PATRICK. I want the total amount of the estimate if I may, Senator—\$3,010,730.

Senator SPENCER. That estimate of \$2,750,000 applicable for civilian employees you think should be increased to how much?

General PATRICK. To the sum I just named, sir—\$3,010,730.

EXPERIMENTAL AND RESEARCH WORK.

Another and very important reduction from the estimate was in the amount allowed to be expended for experimental and research work with airplanes or lighter-than-air craft. My own estimate for that was \$4,200,000. The House decreased that by \$950,000, allowing me to spend only \$3,250,000.

I should like to say that this item is intended to provide for the work done by what is called the engineering division of the Air Service, which is concerned with designing, developing, and testing all airplanes, airplane engines, accessories, and materials. It prepares production drawings, specifications, models of aeronautical equipment, and it supervises the experimental and production manufacture of all material designed and constructed for the Air Service. The engineering division is really the heart of the Air Service. It is carrying on an immense amount of development work, and just at present we are engaged in developing some 16 types of airplanes. We have 8 types of lighter-than-air craft, 12 types of engines, ranging from 160 to 1,000 horsepower; we are developing gun mounts, gun sights, synchronizing gears, bombs, and bomb racks, and releasing mechanisms, and, under "equipment," a dozen different kinds of instruments—these are of the greatest possible importance to men who operate aircraft—photographic apparatus, electric lights, engine starters, generators and storage batteries, clothing, oxygen apparatus, and a large number of other accessories which are absolutely necessary for the proper operation of the Air Service of the Army.

I may say, incidentally, that the Air Service handles over 150,000 different items in its supply work, and most of these are new. They are under development, and it is absolutely essential for the safety of the men and for the proper performance of the mission that there should be a fair amount of experimental and research work done; and with this lesser appropriation I am simply cut down by that amount under what I believe to be absolutely necessary.

Senator SPENCER. The Budget estimate for that was \$4,250,000!

General PATRICK. No, sir; the Budget estimate for that this year was \$4,200,000, and the House allowed me only \$3,250,000. In other words, they cut off \$950,000 from what I believe to be as important, if not most important, work that the Air Service is doing. It handicaps me badly for next year, and I think it imperils the safety of the men who go up in aircraft.

Senator HARRIS. You want the full amount of the estimate?

General PATRICK. I want absolutely the full amount of that, Senator, if I may have it—\$4,200,000, sir. That was a modest estimate.

LIGHTER-THAN-AIR EQUIPMENT.

The next item, which has been decreased, is for the purchase of lighter-than-air equipment. The estimate for that was \$947,000. The House has reduced that to \$450,000.

Senator SPENCER. Last year you spent \$500,000 on that?

General PATRICK. Last year we had \$500,000 for that.

Senator SPENCER. Was there any unexpended balance?

General PATRICK. There will be no unexpended balance of that this year, sir, as I think now.

Senator SPENCER. Did it meet the situation for the current year?

General PATRICK. Practically so; yes, sir. Of course, the lighter-than-air craft, as you know, Senator, had quite a grave misfortune when the *Roma* fell. That took place between my hearing and the time this bill was passed; and I think it quite possible, although mistakenly, that the House decreased the amount for lighter-than-air craft on that account.

Senator SPENCER. If \$500,000 was sufficient for the current year, why do you suggest \$947,000 for the next year?

General PATRICK. For the current year we had the *Roma*—that was one thing—and, of course, we expected to operate her, Senator. This year she is gone, and we have to get some smaller ships to replace her. In that connection I am going to use helium as much as I possibly can for the inflation of all of these lighter-than-air craft; and while the importance of lighter-than-air craft for work over the front lines has somewhat diminished, the type still has its military field which it must fill, and I think we must continue our work with it.

IMPROVEMENT OF HANGARS, ETC.

The House also reduced from \$525,000 to \$324,000 the amount that I will be allowed to expend for the improvement of hangars, stations, gas plants, and the like.

Senator SPENCER. What was the estimate there, General?

General PATRICK. \$525,000, sir; and the amount appropriated by the House was \$324,000, making a reduction of \$201,000.

Senator SPENCER. Did you have any unexpended balance from the \$350,000 that you had for the current year?

General PATRICK. No, sir; and I could have spent much more had I had it.

Senator HARRIS. You want \$500,000 instead of \$324,000?

General PATRICK. \$525,000 was my estimate, sir.

OPERATING EXPENSES.

There is no other specific item which the House has reduced below the estimates as set forth in the bill. The remainder of the reduction seems to have come in what we call the normal operating expense. My estimate for that was \$4,010,270. I presume that the House cut off from that the remainder of the amount that it decreased the Budget estimate, and it did it, roughly, in proportion to the decrease in the number of enlisted men it proposed in the bill. I explained to the House committee that those reductions could not be made proportionately for many reasons: that there were only a few items

in our operating expenses that depended upon the actual number of enlisted men that we had. Nevertheless the House seems to have cut off the amount in just about that proportion.

I reduced the amount estimated for operating expenses as much as I possibly could. It is a little larger than the item for last year but that is because conditions last year were not favorable to flying operations. Next year I expected to do more flying and much more training. This sum is exactly proportional to the total amount of flying hours and to the actual work with troops that we expected to do, and by reducing it they will simply cut off that amount of instruction, that amount of training, and that amount of actual operation which the Air Service should be carrying on during the entire year.

Senator SPENCER. General, can you tell us the relative importance of these several increases which you think are so necessary?

General PATRICK. Yes, sir.

Senator SPENCER. If you had to pick out the first and second and third, which are the things that you regard as relatively the most important for the efficiency of your department?

General PATRICK. The first would be for the experimental and research work. I give that as priority one.

Senator SPENCER. That is, where they allowed you \$3,250,000 you desire for \$4,200,000 would be your first in efficiency?

General PATRICK. That is the first. I put that as the first priority, yes, sir.

The next would be in the amount allowed for civilian employees where I had asked for \$3,010,000, and where they gave me \$2,750,000.

The next would be in the operating expenses, which is not an item in the bill—I mean it is not scheduled there at all—but I assume that must be what they took the further decrease from.

Senator SPENCER. That, therefore, would be included in the increase which you desire in the total on line 4?

General PATRICK. In the total amount allowed; yes, sir.

The other two items are for the lighter-than-air craft and for the improvement of stations. I place them in that order, those two.

I have here, Senator Spencer, a revised wording of the House bill which takes in these changes that I have asked to have made. If it may be allowed, I can hand it to your stenographer, and he can simply put it right in.

Senator SPENCER. We shall be very glad to have it. Suppose, however, you file it with the clerk of the committee. It need not go into the record.

General PATRICK. Certainly.

(The statement above referred to is filed with the clerk of the committee.)

General PATRICK. Then, if I may go on to some other matters they will be right in the same line.

Senator SPENCER. Go right on.

TRANSPORTATION OF EMPLOYEES AND MATERIALS.

General PATRICK. In the act making appropriations for the Army for this fiscal year, under the heading "Transportation of the Army and its supplies," it was provided as to certain branches—the Engi-

neer Department, the Ordnance Department, and the Chemical Warfare Service—that the cost of transporting employees and materials in connection with their work—it reads, “manufacture.” etc.—could be charged against the appropriation. That is a very important provision, and in order that we ourselves may have the same privilege, I ask to have the words “Air Service” inserted at the proper place in that provision, so as to make it apply to the Air Service as well as to these other branches of the service.

Senator SPENCER. What page is that on?

General PATRICK. It is not in the bill at all, sir. It is a new thing that I am asking to have put in. Whether it is possible or not I do not know, but if I may I will file it with your clerk here.

Senator SPENCER. Let me get that clear. You want the Air Service included in those provisions of law that have to do with what?

General PATRICK. The payment for the cost of transportation of civilian employees and all materials in connection with the manufacture and purchase activities—that is what we want—of the Ordnance Department and the Chemical Warfare Service. I want the Air Service included therewith.

BARLING BOMBER.

This is another entirely new subject:

Before the 30th of June, 1920, a contract was made for the construction of what we call the Barling bomber. It is a very large airplane. It will weigh 30,000 pounds. It will be able to carry a 10-ton bomb. It is equipped with six Liberty engines, each of 400 horsepower, and it is being built in New Jersey by a contractor. The cost of that was to be paid from funds that were then available, a part of the amount appropriated for the Air Service for the fiscal year ending June 30, 1920. The plane is not yet finished. It was expected that it would be finished by the 30th of this coming June. There will still remain to be paid the contractor for work costing \$48,500. All of the 1920 appropriation for the Air Service reverts to the Treasury the 30th of this June. I merely ask to have that reappropriated or reallocated, so that we can pay this contractor out of those funds. I have the memorandum prepared all ready here as a suggested amendment.

(The matter above referred to is as follows:)

The sum of \$48,500 of the appropriation for the Air Service for the fiscal year 1920 contained in the “act making appropriation for the support of the Army for the fiscal year ending June 30, 1920, and for other purposes,” approved July 11, 1919, shall remain available until June 30, 1923, for the payment of obligations incurred under contracts executed prior to June 30, 1920.

Senator SPENCER. You speak of the appropriation for 1920. Do you not mean for 1921?

General PATRICK. No, sir; I mean for 1920.

Senator SPENCER. Was it continued for 1921?

General PATRICK. The appropriations go over for two years, Senator Spencer, so that this lapses at the end of this June, sir.

Senator SPENCER. What is the unexpended balance of that appropriation?

General PATRICK. \$48,500.

Senator SPENCER. Will that unexpended balance complete this work.

General PATRICK. That will complete it, and it is available from that particular fund; and the contractor must be paid that sum from some source.

LANDING AND TAKE-OFF RUNWAYS.

In the phraseology of the bill itself there are three other places where I ask for slight changes. They are indicated in the copy which I will leave with your clerk. I ask to have "landing and take-off runways" inserted in the proper place, so that I will be authorized to expend certain sums of money from the general appropriation for that purpose. The reason for it is that just at present there is no money that it is possible to use for constructing these landing places for aircraft in certain localities, and I am very anxious to be allowed to spend a small sum. It will assist me very much in my own flying fields.

Senator SPENCER. How much?

General PATRICK. Oh, I do not suppose it will be over thirty or forty thousand dollars, all told. It will come out of the general appropriation. I do not ask for any additional appropriation at all.

Senator SPENCER. You want that put in here somewhere?

General PATRICK. I want it in the phraseology of the bill somewhere.

Senator SPENCER. Somewhere on page 52?

General PATRICK. Somewhere on page 50 of the bill. I have shown where I want it put in.

Senator SPENCER. Very well. Where do you suggest that it be put in?

General PATRICK. It comes after the word "shops." sir.

Senator HARRIS. What page and line is that?

General PATRICK. It comes in line 7, page 50, after the word "shops." I desire to insert there the words, "landing and take-off runways."

MILITARY AIRWAYS.

Then, on page 51, line 11, after the third word, "therewith," I ask to have inserted: "for the establishment and maintenance of military airways where the purchase of no land is involved." I can explain that briefly.

Senator SPENCER. Do so, please.

General PATRICK. In flying from Washington to any other place—New York, or Dayton, or in flying over any part of the country—it is exceedingly difficult for the pilot at times to find his way. We just want to have some marks put up. If I can paint the names of towns on the tops of railroad stations or barns or anything of that kind, or put up marks that will guide the pilot on his way, it involves no purchase of land or anything else at all, and it is a very insignificant sum to spend; but I ask the privilege of doing that so as to enable a pilot to orient himself while in flight. I may say that I found some difficulty myself down in Texas very recently in flying there. I can follow a map quite well, but every now and then, if I did not follow it continually, I would be a little bit confused, whereas if the names of the towns had been on the houses, or something of the sort. I could have known precisely where we were.

DONATIONS OF LAND.

Then, on page 53, sir, in line 6, immediately after the word "appropriation," I ask to have inserted a provision which was incorporated in the proposed bill as it came over from the War Department, as follows:

Provided further, That the Secretary of War is hereby authorized, whenever a municipality, civic organization, individual, or corporation donates a suitable tract of land, either in fee simple or by leasehold interest, to accept such donation, when in his judgment the interests of the national defense will be promoted thereby, and to establish, maintain, and operate thereon, under such rules as he may promulgate, facilities for flying, including shops, hangars, gas plants, and such other installations as may be necessary for the national defense.

That involves no added expense. It is a mere authorization. There are a number of municipalities, and there are some few corporations and organizations which have offered to provide flying fields, places where aircraft may alight and take-off. They are anxious to have them under governmental control; and this permits the Secretary merely to accept them, to make a nominal lease, for example, at a dollar a year, and to see that the flying done therefrom is under proper control. Many of the accidents in civil flying are due to the fact that there is no inspection of aircraft and no licensing of aircraft pilots. There is no control over it at all. Governmental control will give confidence, and will do much to bring about the improvement of the very sadly behind-the-times condition of commercial flying.

Senator SPENCER. I imagine that what the House had in mind was the fear that if this provision went in there would be shops and hangars and gas plants started, perhaps in a very small way, and next year there would come in a statement of this kind: "We have established at the various places these shops and hangars and air plants, but they need added equipment or enlargement," and it would be opening the door to a very substantial amount. I do not think there would be a particle of objection to the first part of that provision, but it would really be essential to have the latter part of the clause in from your standpoint, would it not?

General PATRICK. I think it very desirable, but if I had to take my choice between part or nothing I should prefer to have the first part, even if the latter part were left out.

Senator SPENCER. Even if the last three lines would have to be left out?

General PATRICK. Absolutely, sir; yes.

PRODUCTION OF HELIUM.

Senator, that covers, I think, a large part of what I have to present to your committee. There are some facts about the helium situation which I regard as important, sir, if you have time to give me a few minutes on that subject.

Senator SPENCER. Certainly.

General PATRICK. I have asked to be present this morning Doctor Moore and Mr. Mulliken, of the Bureau of Mines, and Major Van Nostrand, of my office. These gentlemen are thoroughly familiar with the entire helium situation. If your committee is interested and desires to ask them any questions, or to hear from them, I think

they could very readily and in a very few minutes make plain to you just what the conditions are. I may say myself, in advance, that, as everyone knows, we possess a practical monopoly of this remarkable element.

Senator SPENCER. That, I presume, has reference to the provision of \$400,000 for experimentation, conservation, and production of helium?

General PATRICK. Yes, sir; that is the one case where the House made a slight increase. We asked for \$250,000, and they authorized in this bill \$400,000.

Senator SPENCER. What was the estimate?

General PATRICK. The estimate was only \$250,000.

Senator SPENCER. They exceeded the estimate?

General PATRICK. In this particular instance they did, sir. I think they realized the importance of the matter; and, as I state, the bill was framed after the unfortunate accident to the *Roma*, and they felt that we should have more helium than we have had heretofore. Heretofore the appropriations which were available for work with helium were largely devoted to experimentation, to the perfection of processes for the extraction of helium from natural gas.

Senator HARRIS. Do you think \$250,000 is all that is necessary?

General PATRICK. No, sir; I am very glad indeed to have the \$400,000, Senator—very glad. I wish it were possible for me to advocate even more.

It was estimated that to keep the present plant in operation would cost between \$75,000 and \$80,000 a month; that if we attempted to operate it it would be well to have at least a sufficient sum to keep it in operation for the entire year. It is a very costly matter to shut down that plant and equally costly to reopen it. I was down at the plant just the other day.

Senator SPENCER. Whom do you desire to have speak to us on that subject?

General PATRICK. I should like to have Doctor Moore heard, if possible, just for a moment.

Senator SPENCER. Very well.

STATEMENT OF DR. R. B. MOORE, CHIEF CHEMIST, BUREAU OF MINES, DEPARTMENT OF THE INTERIOR.

PRODUCTION OF HELIUM.

Doctor MOORE. Senator, do you wish me to make a statement, or do you wish to ask me questions?

Senator SPENCER. You had better make a statement, I think.

Senator HARRIS. I think so.

Doctor MOORE. Last year the large plant at Fort Worth was operated only for a few months, on account of the fact that not sufficient funds were available for its operation for the whole year. During that period about 2,000,000 cubic feet of helium was produced; and this amount, with what had been produced in previous years during the experimental period, meant a total of about 2,400,000 cubic feet of helium which is on hand at the present time.

Senator SPENCER. Is Fort Worth the only production plant?

Doctor MOORE. Fort Worth is the only production plant; yes, sir.

Senator SPENCER. You have gotten out 2,400,000 cubic feet?

Doctor MOORE. Two million four hundred thousand cubic feet in round numbers at the present time, although the plant only operated a few months.

In order to have that plant operate for a full year, as the General has stated, it will take from \$75,000 to \$80,000 a month. In addition there are several other items that are required in the way of research work, covering about seventy-five or eighty thousand dollars; so that in order to give the helium project all of the money that is really needed it would require about 12 times \$75,000, which is \$900,000 plus about \$75,000 or \$80,000 for experimental and research work.

We have a laboratory here in Washington which is devoted exclusively to research work in connection with the helium project. Before the war if you desired to buy helium it would cost you about \$2,000 a cubic foot. At the present time the plant in Fort Worth can probably produce it for 10 cents a cubic foot, and perhaps after a few months more of operation we may be able to produce it in that plant for 7 or 8 cents a cubic foot. With more experimental work and the building of a small experimental plant, which should ultimately be done, we feel most certain that the cost can be reduced to 3 cents a cubic foot, or even 2. Therefore during a period of six or eight years there would be represented a reduction of from \$2,000 to 2 or 3 cents, and that is what this experimental and research work is for—in order to cut the cost. Probably 2 or 3 cents will be the ultimate reduction that we can attain.

Senator SPENCER. This \$400,000 would probably enable you, then, to conduct your research work and run a plant four months or four and a half months?

Doctor MOORE. Yes, sir. Then with \$400,000 from the Navy—you understand, it is a joint project of the Army and Navy—that would mean a total of \$800,000 from both services, as against practically \$1,000,000 which is really needed to do everything that is required. We could run the plant for perhaps 10 months on that \$800,000.

Senator SPENCER. Has the Navy bill an appropriation of \$400,000?

Doctor MOORE. Yes, sir; the Navy bill in the House has an appropriation of \$400,000.

Senator SPENCER. Would the percentage of production continue if you could produce 2,000,000 feet in the two months?

Doctor MOORE. I figure that for \$800,000 we probably could produce next year in that plant somewhere between eight and ten million cubic feet of helium; but, of course, it is uneconomical to run any plant for 10 months and then shut it down for 2 months, because you have your personnel to dismiss, etc.

Senator SPENCER. So that the production of that plant is approximately a million cubic feet per month?

Doctor MOORE. Yes, sir.

Senator HARRIS. You think spending \$200,000 more would be economy, do you?

Doctor MOORE. I believe that if we had \$200,000 more—I do not know how the General feels about that—it would mean that we could run the plant for the whole 12 months without any cutting in any way, and also do the research work which is required—\$100,000 from the Army and \$100,000 from the Navy. I do not know whether that meets with your approval or not, General.

General PATRICK. Oh, yes.

Senator SPENCER. Are there any questions, Senator?

Senator HARRIS. No; that is all, Doctor.

STATEMENT OF MAJ. GEN. MASON M. PATRICK, UNITED STATES ARMY, CHIEF OF THE AIR SERVICE—Resumed.

General PATRICK. There are a few other matters, Senator Spencer to which I should like to invite attention, if I may.

AIR UNITS IN RESERVE OFFICERS' TRAINING CORPS.

On page 11 of the bill, lines 12, 13, 14, and 15, there is a prohibition against the organization of any additional Air Service or other units in the Reserve Officers' Training Corps. I greatly hope that the Senate will strike out that provision entirely. The universities of the country over, many of them, are eager to put in courses in aeronautical engineering. The students are particularly anxious to learn something about this new development.

Senator SPENCER. From what universities have you had applications?

General PATRICK. Several of them—Harvard, the University of Michigan, the University of Vermont, the University of Detroit and I think there are others.

Senator SPENCER. They are universities that have no such units now?

General PATRICK. They have no such Air Service units now.

Senator SPENCER. But they want them?

General PATRICK. They want them, and they want them very much, and they are asking me all the time to try to establish them. I believe it would be an excellent thing, excellent training, and advantageous not only from a military standpoint but for the education of the young men who are coming through those institutions. It will be understood that no flying training is given at those institutions. The students have what we call a "ground school course."

Senator SPENCER. Of course, so far as you are concerned, all you want stricken out is the words "or air units"?

General PATRICK. That would be entirely too selfish, Senator. I should like to have the whole provision stricken out.

Senator SPENCER. But, I mean, for your purposes that would be all that would be necessary?

General PATRICK. Oh, for my personal purposes; yes.

AVIATION INCREASE TO OFFICERS.

Then, on page 18, lines 6 to 12, inclusive, a sum of \$846,000 is authorized for aviation increased pay. According to our own estimates that is not sufficient to give the pay which will be due the flying officers of the Air Service; and I want to say that I believe it is absolutely essential that these men should receive this extra pay. You know quite well how hazardous is their work and how they are denied insurance privileges and in many other ways put to additional expense as well as to additional risk of life. The estimate for that

was \$1,000,000. and it has been cut down to \$846,000. I ask that that be restored.

Senator HARRIS. How much difference does that make in the pay, General?

General PATRICK. It makes a difference of 50 per cent, sir.

Senator HARRIS. I am in favor of it, myself.

Senator SPENCER. The increase is a 50 per cent increase under what conditions?

General PATRICK. When actually on flying status and actually performing flying duty.

Senator HARRIS. You want a million dollars instead of \$846,000?

General PATRICK. Yes, sir. They are denied by regulations now leave of absence with flying pay; and while that is a matter of regulation rather than legislation, I hope to take that up and to have it cured by the War Department.

AVIATION INCREASE TO ENLISTED MEN.

On the next page—page 19—lines 4 to 7, the amount allowed for flying pay for the enlisted men is only \$150,000, whereas the estimate was \$250,000.

Senator HARRIS. Is that the same thing?.

General PATRICK. It is practically the same thing.

Senator HARRIS. You pay them extra while they are flying?

General PATRICK. They are paid extra while they fly; and I believe very thoroughly in encouraging the enlisted men to fly. Therefore I ask that the proviso in lines 5, 6, and 7 be stricken out and that the sum be authorized, but without any prohibition against paying more than a certain number of enlisted men.

Senator SPENCER. How many enlisted men in the current year, outside of your regular men, were put on a flying status?

General PATRICK. I will get that figure and put it in. During this fiscal year there was an average number of about 450 enlisted men on flying status.

Senator HARRIS. \$250,000 is what you asked?

General PATRICK. And they allowed only \$150,000.

Senator SPENCER. Is the increase with the enlisted men in the same proportions?

General PATRICK. Yes, sir.

AIR UNITS IN NATIONAL GUARD.

Then, if I may call attention to the provisions on page 80, lines 3 and 4 and lines 15 and 16, in those two places appropriations are made for certain purposes in connection with the National Guard. It is just a question as to how much work the Air Service is going to do with the National Guard and the Organized Reserves. At present there are seven recognized Air Service units in the National Guard. It is essential that they should be provided with necessary equipment and that that equipment should be maintained. The expense of so doing is taken out of the funds appropriated for the National Guard. With the small amounts authorized by the House bill, it will be practically impossible to maintain these organizations at any-

thing like an efficient point. I know that the commanding general of the National Guard is desirous of having these seven organizations at least retained during this fiscal year, in order that we may experiment, find out what it actually does cost, and whether or not it is worth while.

Senator HARRIS. General, how much do you think you can get along with in that respect? I see they estimated \$1,936,320.

General PATRICK. That was for all those purposes, sir—the care of matériel, animals, and equipment.

Senator SPENCER. For the repair of Federal property?

General PATRICK. \$63,000 was what we needed for the Air Service purposes.

Senator HARRIS. What line is that in?

General PATRICK. That is in lines 15 and 16.

Senator HARRIS. You want \$63,000?

General PATRICK. In addition to the \$20,000 that they appropriated.

Senator SPENCER. Has that been estimated for, General? I see that the estimate for repair of Federal property issued to the National Guard is \$25,000. Has there been any estimate for the additional repair item?

General PATRICK. I can not answer that question.

Senator SPENCER. Are you speaking of lines 15 and 16?

General PATRICK. Yes, sir. I understood that that was the appropriation that would be used for the care of Air Service equipment issued to the National Guard. That was the only one they had, and in talking the matter over with the Militia Bureau I understood it had been estimated for, but I am not quite certain, sir. You see, that estimate was not prepared in my office at all. It was prepared in their office.

Major BROWNE. The amount of the estimate was \$25,000.

Senator SPENCER. General, if that is essential, if you regard it as necessary, I suggest that you get in touch with the Budget on that.

General PATRICK. I will, sir.

Senator SPENCER. Just ask them for a letter authorizing the increase of that repair item by the amount that may be necessary for the repair of the Federal property having to do with the Air Service.

General PATRICK. I understand, sir. I will do so. I was not aware whether or not this had actually been estimated for, but I know that I am prohibited from asking for anything except that which has been submitted by the War Department.

Senator HARRIS. But when the members of the committee ask you, it is all right.

General PATRICK. I express merely my opinion as to what I think ought to be put in there. That is my personal opinion.

Senator HARRIS. You say \$83,000?

General PATRICK. \$63,000.

Senator HARRIS. But you want \$83,000 in all?

General PATRICK. \$83,000 in all, instead of the \$20,000.

Senator HARRIS. In lines 3 and 4, how much do you feel that you have to have?

General PATRICK. My understanding is that the estimate was \$1,936,320.

Senator SPENCER. That is right.

General PATRICK. And they have allowed only \$750,000. I am merely suggesting this now; and if I may, when the Militia Bureau come up. I will ask them to have their own estimate on that particular item, as to how much will be needed there for Air Service.

Senator SPENCER. I presume that if the appropriation as passed by the House of \$750,000 for compensation of help for care of matériel, animals, and equipment is not increased, nothing can be done for the Air Service in these seven units?

General PATRICK. I am quite sure that very little can be done for the Air Service; not as much as we would hope to do, and not as much as I think they themselves want done. Similarly, when it comes to the provision for training the organized reserves, we are handicapped likewise. There was an estimate of \$160,000 which was included in the estimate of my own office for work of that kind.

Senator SPENCER. You mean \$160,000 for these seven units?

General PATRICK. No, sir; but for Organized Reserves; the seven units were the National Guard. This sum is part of the civilian personnel item of which I spoke. The House, I think, omitted this \$160,000. That is another reason for increasing the total amount to the Budget figure.

REWARDS FOR EXCEPTIONAL SERVICE IN TIME OF PEACE.

I think, so far as appropriations are concerned, Senator Spencer, that is all that I have to say now. There is a somewhat extraneous matter that I should like to bring to the attention of the committee, although it may be found impossible to include it in the bill, and that is the desire on the part of the Air Service, or at least, on my part and the part of those in command of the Air Service, for some means of recognizing exceptional service in time of peace.

For example, when the *Roma* was destroyed, one of my sergeants, at the peril of his own life, saved at least four of her crew. He cut his way through the burning fabric and stood there and pushed others out while his own clothes were burning, and he himself was very badly injured. I have asked the War Department to recognize that in some way. There is no way in which they can do it. Frequently exceptional skill is shown and exceptional risks are run by flying officers—accomplishments that are well worthy of some recognition by the United States. I do not know that it is within the scope of this bill, but I do ask that when the proper time comes there may be legislation that will provide some mark of appreciation of work of that kind.

Senator SPENCER. That would undoubtedly be legislation.

General PATRICK. It would undoubtedly be legislation.

Senator SPENCER. And under our rules it would be impossible in this bill.

General PATRICK. I understand that.

Senator SPENCER. The War Department, at your suggestion, ought to recommend a legislative provision enabling them to recognize such exceptional service, and that would come up on its own merits as a legislative matter; but we can not put any legislation on this bill.

General PATRICK. Quite so, sir. I simply did not want to lose this opportunity, though, to bring it to your attention. I think it really worth while.

Senator SUTHERLAND. What form do you think it should take?

General PATRICK. Some sort of a badge, such as we have for distinguished service, or something of that sort. There is nothing of the kind in time of peace now.

Senator HARRIS. It seems to me we ought to do even more than that, General.

General PATRICK. I think I am modest in asking that, sir; but I do think something of that kind should be done.

Senator SPENCER. Is that all, General?

General PATRICK. That is all I personally have to present, sir. I have asked General Mitchell, my assistant, to be here. He has just recently been abroad. He was sent over to obtain information from the foreign countries as to the development of aircraft and the use of aircraft there. He brought back a great deal of very valuable information. I do not expect your committee to listen to that this morning, but there may be some points connected with this bill and legislation that he has to present, and if you will permit him to do so, I shall be very glad to ask him to speak to you.

Senator SPENCER. We shall be very glad to hear General Mitchell.

STATEMENT OF BRIG. GEN. WILLIAM MITCHELL, UNITED STATES ARMY, ASSISTANT CHIEF OF THE AIR SERVICE.

GENERAL STATEMENT.

General MITCHELL. Senator, I do not think it is necessary for me to say very much supplementing General Patrick's remarks on what was allowed to be submitted by the Budget. I wish to call the attention of the committee, however, to the fact that we are just barely holding on, just keeping a little bit of Air Service, by these provisions. We are reduced here to \$3,000,000 for the purchase of new aircraft. That is not even enough to equip the Regular Army units that we have in the service. It is only enough to provide a certain amount of pursuit and bombardment aviation for the next year. It certainly should not be cut down below that.

As General Patrick has pointed out, our experimental and research work should not be cut down below the \$4,200,000 that was asked for by the War Department. That is extremely important. If we do not keep up this development we will fall far behind the other nations. The people in Europe to-day regard their air service as their first line of defense, and it is organized in that way. It is going forward more rapidly than anything else, and they are putting their money into it ahead of the navies and of the armies. I mean by that they are giving more development to it than anything else. So we ask you not to cut down these items that are here. This is not a constructive bill in any way, shape, or form. It is just holding on with what we have until we can do some constructive work another year.

Senator SUTHERLAND. General, it has been suggested, has it not, that that was one reason why they were so willing to cut down their navies?

General MITCHELL. Of course. There is no question about that, anyway.

LIGHTER THAN-AIR CRAFT.

In that connection, I should like to say something about the cut that was made on airships. Officers in the air services all over the world are convinced that airships are going to be the airplane carriers of the future. They will be the instruments for carrying the airplanes over the sea and over the land, as distinguished from ships on the surface of the water. They have a much greater radius of action, much greater speed, and if they are equipped with helium we have very little fear of anything happening to them, particularly when we get heavy-oil engines, which we will have in a couple of years. We can take off with airplanes from those airships and land on them in a way that can not be done on surface carriers, we believe. The work of landing on them has not actually been done yet, but 90 per cent of it has been done. That is to say, airplanes have taken off of the airships, they have flown up under the airships to see what the movement of the airship is, and they have landed on wires strung on the ground, which is a much more difficult thing than landing on the airship, because you come up under the airship while the airship is in the line of flight, and when the speeds of airship and airplane are about equal. They go 40 or 50 miles an hour.

Senator SUTHERLAND. You would land underneath?

General MITCHELL. We would land underneath; that is the idea. That is what we were just getting ready to do with the *Roma* when that accident occurred, and that has put us back two years on the proposition, I am afraid. We can not catch up for a long time. The British have actually landed on wires on the ground with airplanes with hooks and loops on them, and they were just about to begin this thing when they cut down on their lighter-than-air development. We can surely land with heavier-than-air craft on lighter-than-air craft.

Not only will airships form a fine military asset in that respect but, according to figures which we have now, we can carry passengers on airships, at distances over 600 miles, for about $3\frac{1}{2}$ cents per passenger mile, providing they have full passenger lists. That is for ships of about 3,500,000 cubic feet. So that is one thing that we can use in commerce, and that can be rapidly converted for use in national defense.

There is a very great popular misconception about airships. People during the war, in order to whistle up their own courage, ran down some of the equipment that other people had. That was the case particularly with the entente, because they had no airships. The airships originally were designed from a military standpoint for reconnaissance over the North Sea, and they fulfilled their mission in that respect very well. The amount of bombardment work that Italian airships did is remarkable. People do not realize the tremendous amount of bombardment work that was done. We also must remember that at that time the bombardment was not one-tenth as efficient as it is now, either in kinds of projectiles used, in the sizes that would be carried, or in the precision of dropping. So that we have in airship development an element that is excellent from an economic standpoint and that has a great military value.

If we do not keep up a consistent development, both from a scientific standpoint—for instance, Doctor Moore was telling you about helium—from the standpoint of engines, from the standpoint of fabric, and, more than anything else, from the standpoint of navigating personnel, we shall fall behind hopelessly.

We have a monopoly of the helium of the world. All the rest of the people are searching everywhere for helium.

What I want to point out particularly is, we do not want to let go of this lighter-than-air development. There is another thing about it: If we get any civil companies in this country, such as are being organized now, the navigating personnel of those aircraft have got to be trained by us; they can not be trained in any other place. So we must keep up our little development in this country, such as it is; and this is a very modest sum we are asking for when compared to any other branch of the service.

Senator SUTHERLAND. General, I suppose the carriers on water are taken up in another bill entirely?

General MITCHELL. Yes, sir.

General PATRICK. That is the naval bill.

General MITCHELL. That is entirely different.

Senator SUTHERLAND. That is the naval bill?

General MITCHELL. Yes, sir. If we can carry them around on airships we can use them over land. Take a proposition like Mexico—we can use them over land as well as over water, do survey work with them, use them in farm surveys, and all such things.

Senator SUTHERLAND. Are you doing anything to build lighter-than-air craft now?

General MITCHELL. We have the projects all up for that in this country if we can get the money to build them, and there has got to be a lot of development work to build them. It will cost about 75 cents a cubic foot to build them, the semirigid, if we get started, and if we do not get started the building will be absolutely in the hands of foreigners.

Senator SUTHERLAND. You are not proceeding along any such lines of experimental development as the Zeppelins, for instance?

General MITCHELL. Our idea is to build them up gradually. We want to build a semirigid this year, and that will allow us to carry out these experiments I spoke about and at the same time train our personnel. In other words, it will take the place of the *Roma*, and I think it can be done in this country as well as in any other.

Senator SUTHERLAND. We have not had very good luck in buying them from other countries.

General MITCHELL. We have had some bad luck, but everyone has had bad luck once in a while. We run into that in heavier-than-air as well as in lighter-than-air. The foreigners have also had just as bad luck.

So I strongly advocate leaving the original amount in there for lighter-than-air. As I say, this is not a constructive provision in any way; it is just holding on to what we have and barely that; it is not building up to such facilities as this country needs or building anything new, but merely trying to hold on to what we have. The present military bill provides that we have 1,514 officers and 16,000 men. In order to keep this Air Service up you have got to keep your trained men in it. If you can not keep the officers and enlisted men we

have, we will not be able to get anyone else. A man does not know very much about it until he has been flying at least three years, and we are gradually losing our personnel. The best men are getting killed all the time, and we are down now to about 600 heavier-than-air officers out of a total strength of 1,514, and of those nearly half of them are on special work with the R. O. T. C., with the National Guard, and with other outfits, so it leaves the air squadrons down to almost nothing. The last squadron I inspected had 5 officers in it and another one had 8, and they ought to have about 50 officers. Under those conditions you can not operate.

The same way with enlisted men. We now have a little over 9,000 men and had to be cut down to 10,000 men because of the reduction in the Army, because we are being reduced proportionately with the rest of the Army. You have one service here that can not stand still. If you stand still you are going backward.

Now, what I strongly advocate is this: The older services have been in existence for years and years and years; they are well known, and although they need improvement their improvement is not needed the way ours is. I most strongly advocate that it be put in this law that the strength of the Air Service shall remain at 1,514 officers and 16,000 enlisted men, irrespective of any other branch of the Army. I think that is a very important thing.

I have some figures that I saw yesterday that came from one of our posts on the Pacific coast, where it shows that with the overhead of the post and the number of men we have there we are only getting 10 per cent of men to work on the actual ships. That is the condition all over the country at all of our stations, as they are so different from any other branch of the Army. They require an airdrome and flying facilities which necessitate their being put outside of cities. They have not the accommodations that are particularly good for the personnel, and, as the personnel is always under a big strain when flying, we have to take great care of our personnel, and very soon we will not have anything left. That is the most important thing.

General Patrick spoke a while ago about giving these flying-service awards. That is most important. I wish to make the suggestion that a service cross, such as given to others, be given to our flying men. It is just a little piece of ribbon and a cross, but a great thing for them to get, rewarding men like the sergeant the other day in the *Roma*, and Captain Streett, who went to Alaska, one of the greatest flights ever made.

REGULAR LEAVE WITH FLYING PAY TO OFFICERS.

There is another important thing that I think should go in this bill. Our flying officers get extra pay, and I think they should be allowed their regular leave on flying pay; each year let them have a month off and keep their flying pay. The way the thing is now, under the present conditions, if they go on leave they lose their flying pay, and the consequence is they will hang on to the last minute and will not go, which is a very bad thing for them and for the service. Our doctors have spoken to me about that a great deal. I think it is very reasonable that they be allowed to have their regular leave on flying pay.

FATALITIES.

Senator HARRIS. How many men have been killed in the service since the war?

General MITCHELL. We run about 15 per cent fatalities per year so you can figure out that the average life of our flying personnel is eight or nine years.

Senator LENROOT. Fifteen per cent fatalities?

General MITCHELL. Yes, sir.

Senator LENROOT. Through accident?

General MITCHELL. Yes; that is in the military service. We are working the machines up to the limit of their capacity all the time and it is particularly bad in this country because we have not any airways, no aids to navigation. That is what General Patrick was talking about—no aids to navigation to help flying across the country, just painting the names of the places on the tops of the roofs—a very small matter, and other aids to navigation so we can find our way in fogs and in bad weather.

About four months ago I had to go right down in Pittsburgh and read the name of the place on the small sign of the railroad station. I was all incased in fogs among those high hills there. Take through Senator Sutherland's country, and there is absolutely no mark at all unless you have some artificial means of finding your way. You hardly see a house from Front Royal, Va., into Charleston. Now, if you have got to go through those countries, you have got to organize for it, and it is very easy to do it; take white stones on mountains as markers, for instance.

Senator SUTHERLAND. I do not see how you can miss some of the houses, General.

General MITCHELL. But it is an awfully hard country to find your way through there. There are practically no marks there at all. In fact, three ships went in the day I went in; one of them got off 70 miles and the other 12 miles, and I happened to hit it; but it is bad business to get off in that country. They say all the birds have one leg shorter than the other so they can walk up and down the hills. We need aids to navigation all through this country.

Another thing: Our lives in the air depend on the excellence of our mechanics. In all the foreign services the mechanics are put by themselves and not required to do guard, police, and fatigue duty and work of that kind. They make them specialists for their work. It is essential that we get our mechanics on that specialist basis. If we do not, we will have to cease operating.

Last summer, where we operated over the water to such a great extent and had so little loss, the officers had to actually act as mechanics to a great extent to make up for the deficiency in our mechanics. We want to go out and enlist mechanics who are trained as mechanics and bring them into the service and maintain them as such. Under those circumstances I advocate it be provided that the President be empowered to fix the pay and status of those mechanics from time to time as the labor market fluctuates, because to bring men into the Air Service under the same conditions that maintain for enlisted men in the Infantry, Artillery, and Cavalry is impossible. You can not help flying accidents under those conditions.

Those are the principal things I have to recommend; that is, that the strength of the service be fixed that we allow our officers to have their flying pay on leave, and that we fix the status for mechanics.

Senator SPENCER. Very well, General. Have you anyone else, General Patrick?

General PATRICK. No; Senator Spencer, unless you have some questions to ask.

Senator SPENCER. Have you any questions, Senator Sutherland?

Senator SUTHERLAND. No, sir.

Senator SPENCER. Senator Harris?

Senator HARRIS. No, sir.

Senator SPENCER. Is that all you have for this morning, Major Browne?

Major BROWNE. Yes, sir.

Senator SPENCER. We will adjourn until 2 o'clock.

(Whereupon, at 1.50 o'clock p. m., a recess was taken until 2 o'clock p. m.)

The committee resumed the hearing, after the taking of recess, at 2 o'clock p. m.

CHEMICAL WARFARE SERVICE.

STATEMENTS OF BRIG. GEN. AMOS. A. FRIES, CHIEF OF THE CHEMICAL WARFARE SERVICE, AND LIEUT. COL. C. E. BRIGHAM.

Senator SPENCER. What page is your Chemical Warfare Service?

General FRIES. Seventy-one, I think, sir. It starts on that.

Senator SPENCER. Suppose you take up the items which you think are unsatisfactory or inadequately dealt with in the bill as we have it, General.

General FRIES. We have, as you know, just the two items, one for the service as a whole and one for the office in Washington.

Senator SPENCER. Yes.

RESEARCH WORK.

General FRIES. The first estimate of \$500,000 practically leaves us with but little more than enough to keep the plant there, and cuts our research, which is the one thing of utmost importance, down to about 15 per cent of what we are doing now. We have there a very large plant.

Senator SPENCER. Where is it?

General FRIES. At Edgewood Arsenal, about 20 miles beyond Baltimore on the Pennsylvania Railroad. We have the plant generally in good condition. Our plans call for putting in a stand-by condition all of that plant which is not necessary to research. In research we, of course, have a chemical division, a mechanical division, and the proof division. The proof division is comparatively small, but it is the final test of research.

We are unable to tell what can be done with a gas or a smoke or a burning material until it is actually tried out in the field. That is important in gases, even supposing we are not preparing to use them offensively, because we must know all about them before we know how to defend against them in case somebody should use them.

There were two or three very great mistakes made in the war, one by the Germans and one by the Allies, because they started in the wholesale production and wholesale use of gases without having tried them out finally in the field. That happened in the case of the Germans with their sneezing gas, so called—diphenylchlorarsine. That is a carbolic acid, arsenic, and chloring compound, and it is highly irritating. It went through our ordinary mask readily, but the German made the mistake of trying to shoot it in shells instead of driving it off by heat. In order to use it in shells he had to put it in bottles surrounded by high explosive. He had to put it in bottles because the high explosive and the gas destroyed each other. The result was that he got but very little in each shell and could not get enough over to be effective, although what he did get over went through the masks and caused some trouble, but not much. But driving it off by heat he could have put over in very large quantities which would have been extremely effective. This he failed to do and presumably because he did not try it out in the field.

The French made the same mistake with the hydrocyanic gas, which they called vincennite. It is effective in the laboratory and in the field, if you can get enough; but it is difficult to keep it down because it is very light, and furthermore, if it does not kill, a person getting a dose of it is very soon recovered. Very few were wounded by it, while there is an average of 20 wounded to one dead with the most poisonous of the other gases used in the war.

Both sides, the French in one case and the Germans in the other, used hundreds of thousands, perhaps a few millions, of those shells with practically no effect, all as a result of insufficient research. And that is what I mean by including our proving in the research.

To keep the plant just in shape for research, which includes the electric plant for lighting for what power we need, and for the heating and upkeep of the laboratories and very small plants that are sometimes used will take just about one-half of the funds allotted: that is, one-half of \$500,000.

In addition, there are certain materials that must be purchased to the extent of \$85,000, while the administration and property divisions take up another \$75,000 nearly, leaving for the research, including proof, only about \$100,000.

Now, those are the figures given me in the last few days by the commanding officer of Edgewood Arsenal, and while some adjustment might be made to increase that assigned for research, the increase would be very slight and totally inadequate.

CURRENT APPROPRIATIONS.

Senator SPENCER. I notice last year, General, you had \$1,350,000. Was that all expended or was there some unexpended balance?

General FRIES. That is for this year.

Senator SPENCER. The current year?

General FRIES. We had \$1,260,000 additional, making about \$2,600,000. The \$1,260,000 is a no year appropriation—available until spent—an appropriation made available in 1918.

Senator SPENCER. That was still available this year?

General FRIES. Yes, sir.

Senator SPENCER. That is, in the current year you have spent all of that; or is there some of that unexpended?

General FRIES. It will run until June 30; and, we presume, we will spend about \$2,200,000—\$424,000 having been withheld by the Budget Officer.

Senator HARRIS. \$2,200,000 did you say?

Senator SPENCER. For the current year.

Senator HARRIS. How much do you feel you have to have, General, this year?

General FRIES. I went over that very carefully recently, and, in my opinion, it is \$1,095,053.

Senator HARRIS. \$1,095,053?

General FRIES. Yes, sir.

The following details show how this amount will be expended:

Administrative, \$40,620: This covers all the administrative work of the entire arsenal and all its activities.

Property and chemical warfare reserve depot, \$62,750: This includes the receipt, storage, and issue of all supplies—defensive, smoke, gas, or incendiary—and forty or fifty thousand stock-record cards that must be kept; also all the administrative work going with the accounting for property valued at many millions of dollars.

General utilities, covering care of plants, buildings, grounds, and the operation of those necessary for research, development, and proving, \$269,271: This is practically the irreducible minimum. It includes the operation of the heating plant, power plant, electric plant, repair and maintenance of buildings for research, and all similar items.

School, \$13,300: This is for the training of officers in all phases of chemical warfare, including smokes and incendiary materials that will be used under all circumstances; also the training of noncommissioned officers for the same purpose.

Chemical research and development, \$357,862.

Mechanical research and development, \$115,000.

Proof work, \$15,000: These last three items amount to \$487,862, and include the vital work of the service. This includes the development work for improving materials in defense, in studying what materials may be used, in making devices such as grenades and other materials to determine the probable way in which they would be used, and the final taking of these materials in the containers into the field and trying them out.

In these sections are the highest-paid men in the entire service. The organization carrying on this work has been built up after five years of intensive effort, including two years of war and three years of peace. Any less funds than the above amounts would require the discharge of a corresponding number of this personnel and the breaking up of its efficiency.

This part of the organization handles all the extremely valuable information on defense chemicals that have so many peace-time applications, to agriculture, to the growing and handling of fruits, to manufacturing, and to the protection of life and property by means of tear gases or similar compounds.

The entire hope of the United States to successfully oppose the use of gas by some enemy in the future—treaty or no treaty—rests with

this force. With the extreme powers of gases to-day and in the future, a gas attack on an Army which did not have complete knowledge of how to meet the attack would result in annihilation to that Army.

The total of the above items is \$873,803. The remaining \$221,250 to make up the \$1,095,053 estimated must cover all purchase of chemical materials and equipment, coal, training, defense, supplies of all kinds, and smoke and incendiary materials. These items are in the same category as the item for general utilities—plants, buildings, and grounds. That is, it is practically impossible to reduce them. Thus, as before stated, any reduction from the \$1,095,053 estimate must come out of the chemical and mechanical research and development departments.

Now that is cutting out all upkeep except a little on the grounds which is absolutely necessary with anything, and that of the buildings needed in the research. It includes, of course, the operation of the power plant for the electric lighting and heat. The plant area is heated by a central heating plant. The area that we use as a headquarters and which was built as a hospital is heated by another separate heating plant; the barracks area for soldiers' and officers' quarters is heated by a third heating plant.

One million ninety-five thousand and fifty-three dollars would enable us to keep practically the research force that we have now, but cutting everything else to the lowest limit for operation.

We, of course, can only run on this million dollars the coming year, by cutting out entirely the upkeep of the plant in general. We spent \$2,200,000 this year, and hold our research force. Also we will not have to improve a number of our facilities, such as the proving ground which was abandoned at Lakehurst, N. J., on June 30 and moved since that time to Edgewood. We have combined all of our facilities which at the end of the war consisted of 10 outside plants, including the proving ground, at Lakehurst, N. J. We have one other property at Midland, Mich., consisting of 17 salt wells for bromine, and a pumping plant, with electric lines and pipe lines. That, however, we are proposing to sell, as we do not feel that it is now needed.

Senator SPENCER. Everything else has been centered at Edgewood?

General FRIES. Everything else has been centered at Edgewood. The last part to be centered there was the proving ground which was at Lakehurst and on land not owned by the United States.

Colonel Brigham has just called to my attention the fact that our recommendation for the sale of the property at Midland, Mich., has been approved, and it is now in process of being sold.

I have spoken so far of research in very general terms. In addition to research we have the manufacture and the filling into shells, bombs or other containers, of the common smokes and incendiary materials that are not involved in any treaty. This includes in smokes phosphorus and other compounds, notably a zinc chloride. The smoke is the only protection, practically, on the field of battle in the open that the soldier has to-day. Its value was just being realized toward the end of the war. It was found, as every man who has hunted knows, that if you shoot through smoke, which is just like shooting through a fog, you have a very poor chance of killing. I often liken it to shooting ducks in a fog guided by the quack.

SCOPE OF WORK.

The Chemical Warfare Service is charged with that work. We are charged not only with the manufacture, storage, and supply of these smokes, but the training of the Regular Army, National Guard, Reserve Officers' training camps, and the like, in the use of smokes.

USE OF SMOKE.

We feel that training with smoke is very vital and must be kept up—as a matter of fact, must be taught—because there is comparatively little knowledge of it. The value of smoke, curiously, was not realized until after the Germans began to use gas. Gas turned loose in a liquid shape in the field evaporates very quickly, cooling the atmosphere. There then ensues a condensation of moisture, which gave rise to the term “cloud gas.” It looked like a white smoke. And the Germans, after the British had built up a considerable defense against the gas itself, suddenly thought of the idea of making a fake gas attack by sending over something that looked like gas and following up the smoke by attacking the British in the trenches, which they did. They caught the British unprepared, in masks in the trenches, and butchered them. Then began the realization of the value of the screening power of smoke, and then the British started the use of phosphorus, which the Allies have a good deal of. The Germans never had any phosphorus, so they did not use it, although it is one of the most valuable of smokes. The Germans, however, started using a great many other smoke mixtures, and as in a number of other things, were practically in the lead up to the end of the war in the use of smoke.

In some of their later battles in the vicinity of the Marne they used heavy smoke screens to veil their movements and achieved decidedly greater success than they could have achieved without it.

Another incident was just brought to my attention by a British officer who came over from England. The place was Zeebrugge, which was one of the starting places for submarines. The British had planned a big air raid on Zeebrugge, and as they began to approach there with airships the Germans put up a smoke screen which covered some square miles and absolutely shut out from the airplanes the object of their attack. The attack failed for that reason.

I am just mentioning this because it shows the possibilities of the use of smoke which is not realized generally in this country. We have that in addition to all the responsibility of being prepared in every way to meet any possible use or misuse of gas by an enemy in the future. The incendiary, or burning part, is not so important. It has one important feature in connection with phosphorous. Phosphorous makes very bad burns on persons where it touches them, and hence is quite useful against soldiers. We used it with great effect in the gas regiment in taking machine-gun nests. The smoke shut off the view of the machine gunners and the phosphorous then actually drove the machine gunners out of their nests. Whenever we could get to within a thousand yards of them, beginning with the second Battle of the Marne in July, 1918, we could drive them out without loss of life. As a matter of fact, our gas troops were kept altogether

at that work after we once started it, about the 24th or 25th of July, 1918.

We are charged with the development of gas masks. The early gas masks and the gas masks in use when we went into the war were a very complete protection against gas when they were put on soon enough and were worn long enough. They were very uncomfortable, but effective. But within six months after we entered the war the Germans introduced the sneezing gas I mentioned earlier, technically diphenylchlorarsine, which is solid particles instead of a true gas. Now the gas mask which we had in those days, which would keep out real gases, would not keep out these solid particles. They went right through it, and, as I have told the Military Committee before, one of our most serious problems in France in 1918 was in trying to keep the sneezing gas out. We were very moderately successful. In this country we started the use of wool felt. We had to filter the smoke out. The British tried using a great number of layers of paper as it comes off the rolls without sizing in it. They have told us since that the paper has broken down and failed to keep. We went to wool felt, which is very expensive, costing about \$1 per mask. There was started in the war a process for taking the linters or husks of the cottonseed and making a paper pulp out of it. The pulp is then put on a fine wire screen, drawing it on by suction, and using it for this filter. We have been working on it ever since the war and now have it all but completely perfected. It is the best material to keep out these solid particles that we have gotten hold of, and it costs about 10 cents apiece instead of a dollar.

RESEARCH WORK.

That covers, in a general way, the research.

Now, we have, of course, a great number of substances that have to be investigated. We know comparatively little about certain of these substances except in the most general way.

One of the things that has come up in regard to these solid particles that we have had so much trouble to keep out and may have trouble with in the future, is the matter of electrification. Apparently these particles get electrified in the air, which changes their ability to go through the filters, and one of the things we are still working on is to see if by utilizing that knowledge of electrification we can not increase our resistance to them.

COOPERATION WITH OTHER GOVERNMENT AGENCIES.

We have at the present time working arrangements with the Department of Agriculture, the Department of Commerce, Treasury Department, and Interior Department, as well as with the Navy Department, for making available the knowledge and facilities we have gained in the use of these compounds. We have the greatest fund and the only very large fund of knowledge in this country of the poisonous qualities of chemical compounds. That was our job in the war, and it has been extended ever since. That knowledge is very useful to all these other departments. We have a number of different problems with the Agricultural Department. There have been a number put up to us. The boll weevil is one; the rust in wheat

is another; the potato bug; the rats that destroy the sugar cane—for instance, in Hawaii and other places; with the Public Health Service the matter of the fumigation of ships where they use the hydrocyanic acid gas. We have been very useful to them in that respect. The hydrocyanic acid gas kills without any warning. It is tasteless, odorless practically, and produces no discomfort. The patient gets enough of it and dies. So the Public Health Service has had a number of casualties on shipboard after fumigation where men entered the rooms before all the gas had gotten out. By working out a process for putting tear gas with it the tear gas lingering after the hydrocyanic acid gas is safe, they are prevented from going in too soon.

Senator JONES. What have you been able to do, if anything, with reference to the rust on wheat?

General FRIES. That has just been taken up. But here is the great advantage to the Agricultural Department: We have this vast fund of knowledge of these poisonous compounds—their physical and other qualities. We know how to handle them, how to make them, and how to protect against them. When they bring up a problem like the rust on wheat and tell us the general characteristics, whether it is fungus growth—I think it is—then, knowing that, with our knowledge of these materials we can pick out a group of materials which is most likely to benefit them. Then a scheme is worked out whereby we furnish this knowledge and, if necessary, the materials, and on occasions an expert; and they furnish the knowledge of the fungus, insects, vermin, or whatever it is, and we work the problem out together.

Senator JONES. I am glad to see that cooperation; but I was wondering if you had succeeded in working out anything for the wheat rust?

General FRIES. I am not sure. We have some 40 of those problems. In the West they appealed to us about something that is rather surprising. One is driving away and even killing blackbirds and crows in places where they have irrigation, where the crows and blackbirds are a serious menace to crops. The birds come in from the deserts and eat the seeds from acres and acres. In some places they have asked us to devise a means of killing jack rabbits or keeping them out of their gardens and crops.

Senator HARRIS. Have you been able to help them in that line?

General FRIES. We have on the jack rabbits. We use mustard gas on them. There are one or two things they must work out to find how to use it best. It has been found that if a little mustard gas is sprinkled across the paths by which the rabbits came in, they would get the mustard gas on their feet. After a while it irritates the feet and the rabbits begin to lick them. Then they rub it over their eyes, so that the rabbits we experimented with all died in four hours. They inoculate and kill themselves.

Senator JONES. Have you used it with gophers? We used to have a great deal of trouble with gophers.

General FRIES. Yes; they tried it with chlorine, and are going to try it over at Presidio, Calif., with chlorine and phosgene. They just take a long tube with gas and stick the tube in the hole for a few seconds and turn it off and leave the hole closed. It kills them very successfully.

Colonel BRIGHAM. We have received two reports in the last few days. One was from Fort Miley, San Francisco. There they could not get at both entrances to the hole, but they killed 75 per cent; and one report from Fort Baker, on the other side of the harbor, they were able to get at both entrances, and they exterminated every one.

Senator HARRIS. Is that very expensive?

Colonel BRIGHAM. It is not very expensive.

General FRIES. I imagine it is vastly cheaper than any other method known.

Senator HARRIS. You have not been able to do anything with the boll weevil, have you?

General FRIES. We have found one substance that is very successful, but like many others, it kills the plant, and it would have to be used in the fall after the cotton is picked. Then you would kill the plant with the boll weevil in it and help things next year. We first started it at the request of people in the South. General Sibert, who got interested in it, and some people in Augusta particularly took an interest, and it was tried out in a small way.

In the last year we have gotten complete working arrangements with the Agricultural Department where we go at the problem from both sides, trying to find out how to work it out. We got the cooperation by the Secretary of War sending a letter to the Secretary of Agriculture and the other Secretaries. Now we have taken experts from these departments to Edgewood, shown them our experiments and literature and what we can do.

The Bureau of Standards had a problem up to determine the flow of gas from natural gas wells. That flow in many cases is on a very large scale. They did not have power enough over here—compressor plants enough to get the necessary amount of air, while we have a great deal of power for compressors to use for refrigeration, which we have to use for making gas in the summertime. By taking that machinery they have been able to work the problem out.

Senator SPENCER. Do you want to say anything on the office of the Chief of Chemical Warfare Service?

General FRIES. May I just say one other word about this other?

Senator SPENCER. Yes; certainly.

General FRIES. We are doing all the chemical warfare work for the Navy. I mention them especially.

MANUFACTURE OF GAS MASKS.

Senator JONES. Do you do this with civilian help?

General FRIES. Entirely with civilian help. We are very well organized. We have an organization whereby we can make in that way between 6,000 and 8,000 masks on a 24-hour basis. We had the charcoal left over from the war. We used what materials we had left over and bought the other necessary parts.

CIVILIAN EMPLOYEES.

Senator JONES. How many civilian employees have you in this plant?

General FRIES. We have at present about 1,400, I think.

Colonel BRIGHAM. It is down now nearer to 1,200, I think.

General FRIES. And we are reducing all the time.

On the basis of this \$1,095,053 that I stated I had figured as the minimum on which we can keep up research, we would have about 500 employees—between that and 550—depending upon variations in salaries.

Senator SPENCER. Will you say anything on the next item?

General FRIES. I would like to ask Colonel Brigham to take that up, as he is in more intimate touch and has charge of it in the office.

Senator SPENCER. All right.

OFFICE OF CHIEF OF CHEMICAL WARFARE SERVICE.

Colonel BRIGHAM. I should like to urge very strongly, sir, that the appropriations for clerks for the office of the Chief of Chemical Warfare Service be restored to the amount submitted by the Budget officer.

Senator JONES. That is, you want seven of class 2 and eight of class 1?

Colonel BRIGHAM. Yes, sir.

Senator SPENCER. Which are the more important of the two, Colonel, if it were necessary to decide between them?

Colonel BRIGHAM. A loss of any clerks, Mr. Chairman, in our very small force is almost destructive of our organization. We are in a little bit different position from many services, in that we have been slowly building up an organization from zero, and are not demobilizing from a large force, and I really do not see how we can do the work with fewer clerks than the amount covered in the estimate of the Budget officer will provide.

Senator JONES. How many have you now in those classes?

Colonel BRIGHAM. We have 18 now. We have never had a statutory roll before; we have simply had a lump sum, and we have now exactly the same number of clerks that we have asked for.

Senator SPENCER. You mean that you are asking for here?

Colonel BRIGHAM. Yes; that we are asking for here.

Senator SPENCER. That is 18 altogether.

Colonel BRIGHAM. Yes, sir.

Senator SPENCER. Counting the messenger.

Colonel BRIGHAM. Counting the messenger.

General FRIES. We get a great variety of inquiries for information on various things because of the newness of this and because of its wide application to all departments as well as our own. That is growing instead of decreasing.

Senator SPENCER. What was the date of the commencement of this service as a separate service?

Colonel BRIGHAM. June 4, 1920.

Senator SPENCER. So you have had practically two years this coming June?

Colonel BRIGHAM. Yes, sir.

General FRIES. We were working under the war-time act before that, but it was entirely unknown whether we were going to continue or not, so we did not get very well organized—could not.

Colonel BRIGHAM. This chart that I have brought along here shows how very skeletonized our organization is, and to take anyone out of there simply means that we will have to try to provide somebody

from somewhere to fill the position. It means the destruction of the efficiency of the organization.

I did not mean to evade your question, Mr. Chairman, and if you desire an answer to that I would say, well, I really have difficulty in saying which would be the most important, as you balance three of one class as against two of the other.

Senator SPENCER. Generally the higher class clerks are found to be more efficient.

Colonel BRIGHAM. It means if we lose them we have got to reduce somebody in pay and then discharge somebody in addition; and, as I started to say, we have built up a highly efficient clerical force now, although a very small one, to a state of high efficiency, and the loss of any one of them would be really fatal to our organization.

General FRIES. I would like to state this, Mr. Chairman, in that connection. Practically all of our sales work and salvage and purchase is done at Edgewood. With this small force that we have, we only have the control over here. We have never been able to get anything more than the control. So, while the other services have practically their technical, salvage, and sales forces right in Washington, we have only the barest control, and the balance of it at Edgewood; and that being only 60 miles away, we are in better shape to do that than perhaps any other service. We have not cut down in the office in Washington because it was a case of building up. We had nothing, practically, to start with.

Colonel BRIGHAM. Since we appeared before the House committee an officer of the Inspector General's office made a complete inspection of the organization of our office in connection with the attempt to reduce the number of officers and the clerical force, and he was very thoroughly satisfied that no reduction could be made in the clerical force of our office organization without very seriously interfering with the work.

Senator SPENCER. And the Budget gave it to you.

Colonel BRIGHAM. And the Budget officer recommended it; yes.

Senator HARRIS. That is \$22,000 instead of \$17,000?

Colonel BRIGHAM. \$23,640 instead of \$17,240.

Senator SPENCER. Anything else, Colonel?

Colonel BRIGHAM. Yes, sir. When we appeared before the House Appropriations Committee the fact was brought out that we had a certain number of technical employees in our office on our field roll, through the authorization of the Secretary of War, and the chairman of the committee remarked that we should have legal sanction for those employees. We did not anticipate that, because we considered that we were fully covered by the authorization of the Secretary of War, and did not at that time come prepared with a proviso covering them, but we did submit that later and sent it up and it was inserted in the hearings, and we understood that it was going to be authorized. It does not call for any additional funds whatsoever; it is simply an authorization which a number of other departments have for a similar purpose.

SERVICES OF SKILLED DRAFTSMEN.

Senator SPENCER. Have you the language that will be necessary for that?

Colonel BRIGHAM. Yes, sir; I have the language for the proviso covering that:

Provided, That the services of skilled draftsmen, chemical engineers, chemists, and such other services as the Secretary of War may deem necessary, may be employed in the office of the Chief, Chemical Warfare Service, to carry into effect the appropriations for that service, to be paid from such appropriations: *Provided further*, That the entire expenditure for this purpose for the fiscal year 1923 shall not exceed \$21,000, and the Secretary of War shall each year, in the annual estimates, report to Congress the number of persons so employed, their duties, and the amount paid to each.

Senator SPENCER. Where do you want it, on line 20, page 72?

Colonel BRIGHAM. I should say immediately after line 25.

Senator SPENCER. Line 24.

Colonel BRIGHAM. Well, the figures go down to line 25.

Senator SPENCER. On page 72?

General FRIES. It will go in as a proviso. I think it should be right after line 20, as it is in the bill, following the \$500,000.

Senator SPENCER. On line 20, that is, right at the close of \$500,000?

General FRIES. Yes, sir.

Senator JONES. You want the money to be used for that purpose, whatever is allowed you, out of the \$500,000?

General FRIES. Yes, sir. That is simply to allow us a few technical men here in Washington which we have not at present.

Colonel BRIGHAM. There is one other matter to which I should like to call the attention of the committee.

Senator SPENCER. Yes, sir.

Colonel BRIGHAM. That is the question of the enlisted men in the office of the Chief of Chemical Warfare Service. We have had a table of organization which provided enlisted men for our office, which was approved by the War Department, but very recently it has been called to our attention that we must also receive legal authority for that.

Senator SPENCER. That would require legislation, would it not?

Colonel BRIGHAM. Yes, sir.

Senator SPENCER. We can not do any legislating in this bill.

Colonel BRIGHAM. There is exactly the same proviso for certain other departments which has been carried in the legislative, executive, and judicial bill.

Senator SPENCER. But now we have changed the rules. If that is a matter of legislation which changes the personnel of your department that must be a separate bill and can not go in the appropriation bill. We used to put those things on in riders, but we can not do that any more.

General FRIES. It was only providing for bringing them over from Edgewood into the District.

Senator JONES. That is legislation, I think. If it is, it would send our whole bill back to the committee if we put it in and anybody was disposed to make a point of order. You might submit the proviso you want, and then we can consider recommending it on the floor and asking unanimous consent to put it in.

DETAIL OF ENLISTED MEN TO WASHINGTON.

Senator SPENCER. Have you it?

Colonel BRIGHAM. Yes, sir; I have the proviso here.

Senator JONES. If you put it in here and some one should make a point of order, it might send the whole bill back.

Senator SPENCER. Read it.

Colonel BRIGHAM [reading]:

Provided, That nothing contained in this act or any other act shall be construed as precluding the detail upon duties of a technical or military nature of not to exceed ten enlisted men of the Chemical Warfare Service in the office of the Chief of Chemical Warfare Service.

Senator SPENCER. That is clearly legislation, I think. Do you not think so, Senator Jones?

Senator JONES. Oh, yes.

Senator SPENCER. I do not say that is not desirable, but it is legislative. You can leave that with us, so, if the committee desires, some one may offer it on the floor after we report the bill, but we can not put that in the bill.

Is that all, Colonel?

Colonel BRIGHAM. That is all, sir.

Senator SPENCER. What do you want us to take up to-morrow, Major?

Major BROWNE. The quartermaster items.

Senator SPENCER. Have you anything more, General?

General FRIES. No, sir; I have not anything.

(Whereupon the committee recessed until Thursday morning, April 13, 1922, at 10.30 o'clock.)

WAR DEPARTMENT APPROPRIATION BILL, 1923.

THURSDAY, APRIL 13, 1922.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10.30 o'clock a. m.

Present: Senators Spencer (chairman), Lenroot, Sutherland, and Harris.

QUARTERMASTER CORPS.

Capt. Albert J. Chappell, United States Army, appeared.

STATEMENTS OF MAJ. GEN. HARRY L. ROGERS, UNITED STATES ARMY, QUARTERMASTER GENERAL, AND MAJ. CHARLES P. DALY, UNITED STATES ARMY.

GENERAL STATEMENT.

General ROGERS. Mr. Chairman, I have prepared a concise statement of how the Quartermaster Corps estimate is made up, which I should like to submit to you.

Senator SPENCER. We shall be very glad to hear it.

General ROGERS. The estimates submitted by the Quartermaster General under 14 appropriations covering supply and maintenance total \$73,000,000. This total was fixed by letter from the Budget officer, War Department, dated September 2, 1921.

The \$73,000,000 referred to was allocated by the Quartermaster General to appropriation titles based on what was believed to be proper percentages leading to a balanced estimate, and estimates were submitted accordingly. However, after a more careful study of requirements to meet essential needs of subsistence, clothing, heat, light, forage, quarters, and transportation, it was found that a reallocation of amounts as to appropriations, without any increase of the total of \$73,000,000 was necessary, and there was presented to the subcommittee of the House Appropriations Committee amounts as to appropriations differing from the amounts appearing in the Budget. Since the hearings before the House committee certain conditions have warranted a further reallocation as to appropriations based on an Army strength of 156,000 men. The reallocation now presented to your committee has the approval of the Secretary of War and does not exceed the total of \$73,000,000 fixed.

The amounts as determined under the several appropriations are the minimum within which an Army strength of 156,000 men can be provided for with subsistence, clothing, heat, light, forage, and maintenance of equipment and quarters.

Senator SPENCER. Does that include the Philippine Scouts?

General ROGERS. Yes, sir.

In many of the appropriations the value and quantity of certain stocks are reflected, resulting in a less amount being estimated for than would have been the case were not these stocks available. This action has particular application to the appropriation "Clothing and equipage," and represents a reduction of approximately \$7,000,000 in the aggregate and over \$2,000,000 in the amount appearing in the Budget.

Senator HARRIS. General, you are \$2,000,000 below the Budget estimate for your work, are you?

General ROGERS. Yes, sir. We made a cut of \$2,000,000 in that appropriation before the House Appropriations Committee.

Senator HARRIS. How much did the House give you? I want to get it in mind as I go along.

General ROGERS. \$5,000,000.

Senator HARRIS. And the Budget estimated how much?

General ROGERS. The amount in the Budget was \$7,868,589.

Senator HARRIS. And how much is it that you wish?

REVISED ESTIMATES.

General ROGERS. Our present reallocation that we are going to recommend to the Senate committee is \$5,197,444. That is \$197,444 more than the House appropriated, but is the amount that we originally presented to the House in the cut that was voluntarily offered by the Quartermaster General.

In the appropriation for "Subsistence of the Army" the ration is figured at 30 cents per day in the reallocation submitted to your committee as against 36 cents per day in the reallocation submitted to the House committee. This is due to the fall in costs of components since the estimate submitted to the House was prepared. In addition, many economies have been effected in the current year, the effects of which will permit of efficient operation under the limited appropriation estimated for.

These economies are represented in a material reduction of civilian personnel, discontinuance of certain supply points, discontinuance of clothing manufacturing at the Jeffersonville depot and concentration of all such manufactures at the Philadelphia depot and the substitution of materials on hand in the manufacture of certain specification articles.

In the amounts estimated for under "Subsistence of the Army," "Regular supplies," "Incidental expenses," "Army transportation," "Clothing and equipage," "Water and sewers," and "Barracks and quarters" are included funds for the training, etc., of Organized Reserves and the maintenance of divisional and regimental headquarters in connection therewith. There are also included in each of the appropriations "Regular supplies," "Incidental expenses," "Water and sewers," and "Barracks and quarters" funds for the maintenance and operation of civilian military training camps. Any material reduction in the estimates of the Quartermaster General under the appropriations listed will be reflected in reductions which will have to be made in the amounts contemplated in the estimates for the maintenance and operation of the Organized Reserves and civilian military training camps arrived at and will have the effect

of necessitating a material change in the program by the War Department to carry on the development and training of these important components of the land forces of the United States.

There has been no "padding" of these estimates in anticipation of cuts therein by Congress. They are based on actual requirements for the strength estimated for and are computed in the case of supplies and services at the current rates. If the strength used as the basis of the estimate is to be allowed, any reduction in the funds asked for will necessitate the abandonment of essential activities.

I should like to call the attention of the committee especially to the fact that these estimates have been very carefully made up, and, as stated in my statement, not padded at all. They represent just what we actually need.

Senator SPENCER. Now, please take the items where you think the House has made mistakes, or where the amount is inadequate or for any reason unsatisfactory. Never mind saying anything about those that are satisfactory to you.

BASIS OF ESTIMATES.

Major DALY. Mr. Chairman, the House appropriated for only 115,000 men, and we are directed by the Secretary of War to present an estimate for 156,000, so that I can not very well make any comparison between what the House gave us and what we are going to ask for.

Senator SPENCER. Will the amounts carried by this bill be proportionately increased from these amounts as the Army is increased from 115,000 upward?

General ROGERS. That will depend on the items.

Senator SPENCER. Some of them would, and some of them would not?

General ROGERS. Some of them would, and some of them would not.

Senator SPENCER. There we would like to have our attention called to the difference. In other words, where a 10 per cent or 20 per cent increase in the enlisted and officer personnel of the Army would result in a 10 per cent or 20 per cent increase in the item, that is perfectly simple. That is mathematical.

General ROGERS. We can not prorate that in all items. In subsistence and pay of the Army, and items like that, of course we can do it.

Senator SPENCER. Wherever it does not follow we want to know it, and the reasons.

Major DALY. We have estimates here for two strengths. There are certain constants in these estimates that will have to be considered. As I understand, Mr. Chairman, you want me to give you testimony as to the differences for the strength passed by the House where we consider that they have not given sufficient money for that particular strength?

Senator SPENCER. That is right. For example, at the bottom of page 25, where that item of \$12,000 appears, the authority to use \$12,000 for the meals of members of the National Guard on rifle practice, there is no need of saying anything about that if that is a satisfactory amount. Pass it right along. The next thing would be

the rate per man. That would be fundamental, because that would not be affected by the number in the Army. If 75 cents is satisfactory, as the House put it, just pass it right on. If not, let us know the reason why.

Major DALY. I think we can make it clearer if we will give you the totals that we require for the strength as passed by the House, and the totals for an Army of 125,000 men, and the totals for an Army of 156,000 men, as directed by the Secretary.

Senator SPENCER. All right. The 125,000 includes the Philippine Scouts?

Major DALY. One hundred and thirty-two thousand—125,000 Regular Army and 7,000 Philippine Scouts.

Senator HARRIS. Mr. Chairman, I wonder if we had not better consider these items from the 115,000 standpoint, and then let him give us the figures above that for the 156,000?

Senator SPENCER. That will come out in his statement.

Senator HARRIS. But I think, as a basis, we ought to have the 115,000, because these figures of the House committee are all made on that basis. I am just saying that to work on.

SUBSISTENCE OF THE ARMY.

Major DALY. For subsistence of the Army, sir, considering the appropriation as passed by the House, involving 122,000 men, we would need a total of \$15,965,190. That is less than the House passed. The House passed \$16,550,000.

Senator HARRIS. What was your statement about this item of \$16,550,000 allowed by the House?

Major DALY. Our estimate for that number, as presented to you, is \$15,965,190. The House allowed \$16,550,000. The reason for that difference, perhaps, is due to the cost of the rations. We presented the ration cost to the House at 36 cents per man per day. We have computed the ration cost in this estimate we are presenting to you at 30 cents per man per day.

Senator SPENCER. I see.

Senator HARRIS. This is based on a ration cost of 30 cents per day?

Major DALY. Yes, sir.

Senator HARRIS. You want, then, instead of \$16,550,000, how much?

Major DALY. \$15,965,190.

Senator SPENCER. Would the other two numbers, 132,000 and 156,000, be mere mathematical changes?

Major DALY. No, sir; I can give you the amounts.

Senator SPENCER. Very well.

Major DALY. For 132,000 men, \$17,059,733; for 156,000 men, \$18,685,194.

Senator SPENCER. The latter figure is a little over the estimate?

Major DALY. Yes, sir.

Senator SPENCER. The estimate was \$18,029,776.

Major DALY. But the estimate, as General Rogers stated in his statement to the committee, was not based on facts. It was an estimate that was submitted on a percentage, an application of a percentage to create a balanced estimate, and after figuring it over the general and that that amount was wrong.

Senator SPENCER. Did the Budget send in an amended estimate?

Major DALY. No, sir; they did not, but we presented to the House committee an amended estimate.

Senator SPENCER. Do you not think it would be wise to get an amended estimate by the Budget?

Major DALY. I think the Budget, sir, are interested perhaps in the total of \$73,000,000. We have not exceeded that anywhere, although we have changed the figures in the several appropriations; but the total of \$73,000,000 fixed by the War Department has not been exceeded in any case.

Major BROWNE. Mr. Chairman, I think if the committee, in considering these various items, think it desirable that a substitute estimate be submitted in place of the original estimate as printed in the Budget that can be processed without any difficulty.

Senator SPENCER. I think I would get it. That question will come up with every member of the committee who is not here.

Major BROWNE. I think there will be no difficulty about that being done, if you wish, within the limiting amount of \$73,000,000.

Senator HARRIS. You mean that you will give us figures for all these three items all the way through for the members of the committee?

Major BROWNE. Yes, sir. I think that could be sent through the Budget.

Senator HARRIS. I think that would be best.

Major BROWNE. Of course, I am not authorized to say, but I thought probably it would be transmitted by the Director of the Budget without any doubt.

SALES COMMISSARIES.

Major DALY. With respect to the balance of the appropriation as passed by the House, we have no objection up to line 11, page 27, and the language embraced in lines 11 to 21 on that page. The Secretary of War has advised both committees requesting that the language be eliminated, and stating that he had taken the necessary steps to place the sales stores on a self-sustaining basis; and he recommends that no further legislation be passed reducing the advantages of these sales stores which have been given to officers and enlisted men for many years by direct legislation.

The language appearing in the act passed by the House would involve material clerical work in keeping track of the various costs and assessing the various selling prices, and would in many cases, because of the excessive overhead necessary to keep track of this, bring the selling price of the supplies to a point much higher than they could be bought locally from commercial dealers. The object of the Secretary of War is to put those sales stores on a basis where the prices will be such as to be equal, at any rate, to the commercial prices in the locality, and without expense to the Government in the cost of overhead, transportation, and delivery.

Senator LENROOT. Can you tell us how the prices are now arrived at?

Major DALY. The prices are now arrived at in accordance with law, sir—that is, the actual invoice price; the invoice price at the time of purchase without any transportation or any other cost.

Senator LENROOT. Then, if this language is eliminated, that could not be included, could it?

Major DALY. The Secretary of War, though, has taken steps to fix the selling prices.

Senator LENROOT. I thought you said the law fixed the price at cost, without consideration for overhead?

Major DALY. For subsistence stores, it does; yes, sir.

Senator LENROOT. Then, how could the Secretary of War fix a higher price?

Major DALY. The law reads:

Hereafter all sales of subsistence supplies to officers and enlisted men shall be made at cost price only and the cost price of each article shall be understood in all cases of such sales to be the invoice price of the last lot of that article received by the officer making the sale prior to the first day of the month in which the sale is made.

That is the act of July 5, 1884.

Senator LENROOT. How could the Secretary of War go beyond that point and include overhead of freight handling, storage, etc.?

Major DALY. I am free to confess, sir, that I do not know.

Senator LENROOT. I can see very readily the difficulty here; but unless something of this kind is done I do not see how the Government can ever recoup these actual costs of freight, handling, storage, and delivery.

Major DALY. But we did submit, sir, a proviso that would do what the Secretary of War wants to do, not as drastic as this appearing in the act.

Senator LENROOT. Can you read it into the record, so that we will have it to consider?

Major DALY. Yes, sir. It reads:

Provided, That hereafter the issue and authorized sales of clothing and other quartermaster supplies shall be at the average current prices, to be determined and fixed by the Secretary of War.

Senator SPENCER. That is the present law, is it not?

Major DALY. Not for subsistence stores.

Senator LENROOT. It seems to me that is very indefinite, however. What do you mean by "average current prices"—where, and at what point?

Senator HARRIS. You mean retail prices, do you?

Senator LENROOT. He can not mean that.

General ROGERS. May I make a statement on that point, gentlemen of the committee?

Senator LENROOT. Certainly.

General ROGERS. As I remember, in the hearing before the House committee the question came up in regard to the overhead, and I suggested that if they would put in this provision that Major Daly has just read we could add sufficient overhead so that the Government would not be out anything in the sales to officers.

Senator SPENCER. Is that overhead substantial?

General ROGERS. No, sir. About 27 per cent for the sales commissary in Washington. The overhead at posts and camps is very small.

Senator LENROOT. What staples are included in these commissary stores?

General ROGERS. Just what you get in an ordinary grocery store and meat shop. We have a meat shop.

Senator LENROOT. It does not include heavy things like coal, and things of that kind?

General ROGERS. No, sir. That is provided for in another way; but take the groceries: Most of them are purchased right here in the city for this store, and the meats are contracted to be delivered here, so that the officers and the soldiers who buy the supplies here pay the exact cost price, and, as I say, the only overhead is in the delivery—the trucks that deliver the goods, and the clerical hire.

Senator HARRIS. How about the rent of the buildings?

General ROGERS. The sales store in Washington is located in a temporary building owned by the Government, but the land on which the building is located is rented.

Major DALY. We already have an authority of law in an act approved March 8 of this year in this same language, "for issue and sale at average current prices, to be determined and fixed by the Secretary of War," in the case of clothing. This language is made part of the wording of the appropriation for "Clothing and camp and garrison equipage," and is to provide for the sale and issue of articles of clothing and equipage at the current prevailing price in lieu of the price paid at time of purchase during the war period.

Senator LENROOT. Do you know what construction would be given to the term "average current prices"?

Major DALY. It is felt that it gives authority to add to the invoice price the overhead necessary to handle and sell the goods.

Senator LENROOT. If you should say "average current prices" that might be retail, in which case there would be no advantage in the commissary. If it was wholesale, it would exclude the overhead.

Major DALY. Yes; if we took the average current prices here for the wholesale house, for example, it would exclude the overhead.

Senator LENROOT. To be sure. It would either practically nullify the advantage, if your "current prices" means retail prices; or, if it means wholesale prices, it would exclude the overhead.

I think we have the necessary information on this subject.

REGULAR SUPPLIES OF THE ARMY.

Senator SPENCER. What is your next item?

Major DALY. The next item, sir, is on page 27, line 22, "Regular supplies of the Army." For 122,000 men our estimate was \$12,000,000.

Senator SPENCER. \$12,000,000 even?

Major DALY. Yes, sir. For 132,000 men our estimate was \$12,750,000. For 156,000 men our estimate was \$14,000,000 even.

Senator SPENCER. What I said before in regard to additional estimates applies also to this. You ought to get the Budget to send in a revised estimate, because doubtless their mistake in arriving at the amount is true of this item as it was true of the other one.

Senator LENROOT. Does that occupy the same ratio as your other differences or not? It would not be the same, would it?

Major DALY. No, sir.

Senator LENROOT. I think you had better give us in this item your basis of differences in the different numbers of men and what is cov-

ered by that. I think a good many of the items covered by this paragraph would be the same for either size Army. I should like to have you go over some of the items to see where the reduction comes.

Major DALY. The first item of the appropriation under "Regular supplies" is "Care and protection."

Senator SPENCER. What page is that on?

Major DALY. Page 27.

Senator LENROOT. Is that where the major items come?

Major DALY. No, sir. The major items are fuel, forage, and light.

Senator LENROOT. That is what I supposed; and that is where the reduction comes?

Major DALY. That is where the reduction comes.

General ROGERS. You just want some of the larger items, as I understand?

Senator LENROOT. Oh, yes; I did not mean the detail.

Senator HARRIS. What about the items following that, on page 30, where the bill says "not to exceed"? Suppose you mention those items.

Major DALY. We are going to say something about those, sir. One of the large items is power, heat, electric current for light, and electric current for moving-picture machines.

Senator SPENCER. Where does that occur—in what line?

Senator LENROOT. Line 5, page 28.

Major DALY. The amount appearing in the act passed by the House was \$1,250,000 for that purpose.

Senator SPENCER. Your estimate was \$1,400,000?

Major DALY. The estimate was \$1,400,000. The amount required for that purpose for 132,000 men is \$1,300,000.

The next large item is fuel. The House allowed \$3,000,000 for that purpose.

Senator LENROOT. Is that the phraseology that has always been there?

Major DALY. It has always been there. There is no change in that, sir.

Senator SPENCER. That is on what line?

Major DALY. It is on line 7, page 28. This particular item comes under the term "heat," there.

Senator SPENCER. Oh, yes.

Major DALY. The House allowed \$3,000,000. We asked for \$3,599,798.

Senator SPENCER. That was the estimate?

Major DALY. Yes, sir.

Senator SPENCER. Very well.

Major DALY. For 132,000 men, the amount is \$3,775,000. For 156,000 men, the amount is \$3,800,000.

The next large item is forage. That is on line 15, page 29. The House allowed \$4,000,000. Our estimate is \$5,619,647. The estimate for 132,000 men is \$4,900,000. The estimate for 156,000 men is \$5,619,647.

Another large item is civilian employees. That is not specifically mentioned in the act. The employees are hired under the general authority in the act for carrying on the work provided in the appropriation.

Senator LENROOT. I should like to know how much is included for that purpose in this paragraph.

Major DALY. Do you want the amount, sir?

Senator LENROOT. Give the amount.

Major DALY. The amount passed by the House was \$850,000.

Senator LENROOT. What is that for—civilian employees?

Major DALY. The amount of our estimate was \$932,000. The amount required for 132,000 men is \$850,000. The amount required for 156,000 men is \$932,000.

Senator LENROOT. I should like to ask you right there whether the estimate sent to the House was not based on 156,000 men throughout this bill?

Major DALY. Yes, sir.

Senator LENROOT. Oh, that is right; the estimate was \$932,000.

Major DALY. Yes, sir.

Another large item is ice for issue to organizations and for the preservation of stores. That is on line 24, page 28.

Senator LENROOT. By the way, have you a table there that you can put right into the record on that whole item?

Major DALY. Yes, sir; I can put that full detail into the record.

Senator LENROOT. Do that; then that will save going over it.

Major DALY. Yes, sir; I will give you a copy of this table for the record.

(The table referred to with other tables showing details of the several appropriations are inserted on page 705.)

Senator LENROOT. I should like to ask a question on this general item. This contemplates continuing the same number of Army posts that we now have?

Major DALY. It is based on that, sir. That is the number that are established and to be continued under the War Department policy.

Senator LENROOT. Under the present War Department policy?

Major DALY. Yes, sir.

Senator LENROOT. Assuming that there is a reduction of personnel, might it follow that there would be a reduction in the number of posts?

Major DALY. I am not prepared to say.

Senator LENROOT. I am purposely putting it in that form, not whether there would or not, but I will put it this way: If there should be a reduction in the number of Army posts, it would affect this item to some extent?

Major DALY. Yes, sir.

Senator HARRIS. The Secretary of War has already stated that there would be a reduction.

Senator LENROOT. I understood that he had. That is why I am asking the question.

Senator SUTHERLAND. Did he so state before the committee?

Senator HARRIS. No; he has not been before the committee.

Senator LENROOT. That was a press statement.

Senator SUTHERLAND. I saw that.

Senator HARRIS. General Rogers, I should think it would reduce your estimates a great deal if they abandon a number of posts. It seems to me it must be much more expensive to handle a large number of posts for a small number of men than it would be to have a few posts where the overhead would not be so great.

General ROGERS. Senator, these estimates are based on the present policy of the War Department. That is the number of posts that we are told to estimate for. We have no control over that. We have to base our estimates on the War Department program.

Senator HARRIS. I understand that.

General ROGERS. If there should be a decrease in the Army, and whole posts were abandoned, of course there would be a decrease in the expense.

Senator LENROOT. Oh, certainly.

General ROGERS. But where, for instance, there are 60 men in a barrack which will hold 100, of course there is no decrease in fuel or anything else.

Senator LENROOT. The only purpose of my question was to get the matter of policy. A reduced number of posts would affect these items?

General ROGERS. Yes, sir.

Senator HARRIS. The point I was trying to make was that relatively the expense is higher when you have a larger number of posts for the same number of men.

General ROGERS. Yes, sir.

LIMITATIONS ON EXPENDITURES.

Major DALY. On page 30, sir, beginning with line 6 and continuing down to and including line 20, are a number of limitations which we are asking to have removed so that the appropriation can be expended as one sum, which will enable the Secretary of War and the Quartermaster General to apply the funds better than if they are restricted as provided here.

Senator SPENCER. Do you want all the limitations removed, from line 6 down to line 25—all the rest of the page?

Major DALY. Yes, sir.

Senator SPENCER. You want all of that eliminated, down to line 3 on page 31?

Major DALY. Yes, sir.

Senator LENROOT. There are no new limitations here?

Major DALY. No, sir.

Senator LENROOT. The same limitations were here before?

Major DALY. There are different amounts; that is all.

Senator LENROOT. If the limitations stay in, have you anything to say?

Major DALY. No; if they stay in, of course we will operate, except that perhaps we would want them raised in the matter of fuel and forage to meet our needs as presented to the committee for these strengths.

Senator LENROOT. Yes; but are you prepared to give us what those raises should be?

Major DALY. Yes, sir.

Senator LENROOT. You had better put them in right now, I think.

Senator HARRIS. Senator Lenroot, he is going to give us estimates for the different size Army all through, as I understand him.

Major DALY. Yes; I will give you these details.

Senator HARRIS. Will the table you are going to submit cover that?

Major DALY. The table will show that.

Senator HARRIS. All right; that is fine.

SALE OF HORSES AND MULES.

Major DALY. Beginning on page 30, line 21, we desire an amendment to the proviso. The proviso now reads:

That the Secretary of War is authorized and directed to sell as soon as possible after the approval of this act, upon such terms and under such conditions as he may deem most advantageous to the best interests of the Government, such horses and mules now being held at remount stations and posts or with organizations of the National Guard or units of the Reserve Officers' Training Corps as are not in actual use.

We want to substitute for the words "not in actual use" the words "not required for military use." There are many occasions when animals are not in actual use, but they must be available when the need arises, and to permit their temporary withdrawal because not actually being used at a time when organizations other than those to which they are assigned can use them is likely to operate to the material detriment of the service, and it is believed that what is intended in the proposed legislation can be cared for as well under the substitute we offer.

Senator LENROOT. I think that is true as far as this language is concerned, but is your proposed language any different than declaring them surplus?

Major DALY. No, sir.

Senator LENROOT. That is what it amounts to, and that is done now.

Major DALY. But there is a distinction, sir, between the terms "in actual use" and "not required for military use."

Senator LENROOT. Oh, I understand; I see the point of your objection to the House language, but with your substitute the proviso means nothing. It is just declaring them surplus, is it not, as they do now?

Major DALY. Yes, sir.

Senator LENROOT. So that your substitute would not mean anything.

Senator SPENCER. It is just another way of saying that they would like those last six words stricken out.

Senator LENROOT. Certainly.

Senator SPENCER. There is no question about it.

Senator LENROOT. But it would be better to strike it out than to put in a useless thing. Of course, I readily see the objection to this proviso with the words "in actual use"; but in that connection is there any reserve kept now of horses?

General ROGERS. I think we have a 10 per cent replacement to replace the animals. This provision would wipe out all of the remount depots. We have remount depots, as we call them, to train these horses before they are issued to troops, and then the replacements are made from those remount depots. This provision would take all the animals away from those depots, and we would not have any at all.

Senator HARRIS. General Rogers, is it not cheaper to buy the horses than to have these stations the way they are now—for instance, the one over here in Virginia, which I have heard criticized as being rather expensive? I am not familiar with it. I am ignorant on the subject. I just want to know the facts.

General ROGERS. We buy the horses and then send them to these stations and train them. You know if we do not do that the horses are bound to be sick. They have what we call shipping fever, and they always have to be put at a station and kept there a while, and then we train them before we turn them over to the troops. We have cut down the remount stations so that we have only four now, and we have reduced the expenses to a minimum as far as we know, and we are using enlisted men instead of civilian employees.

Major DALY. I think, sir, we have shown that buying colts between three and four years old and placing them in the remount depots for development and training before placing them in the hands of troops has increased the service life of the animals over the old system of buying directly from contractors and shipping the matured horses directly to the posts and then putting them into service. The horse at the remount depot has a longer service life, and therefore, of course, is more economical in the end.

Senator SUTHERLAND. Have you any figures on that?

Major DALY. There are figures, sir. We gave them to the House Military Committee in December, 1910. The life or period of duration of the matured horse purchased under contract and sent direct to organizations for service, considering a period of 25 years—1880 to 1907—exclusive of the period of the Spanish War and Philippine insurrection, has been six and four-tenths years. Under the plan of developing and training of remount depots it is believed that the service life of the animals will average 10 to 12 years.

Senator LENROOT. How long does it take to train an animal?

Major DALY. They keep them at the remount depot six to eight months. Of course, we get most of them, Senator, when they are colts. They are not mature enough at time of purchase to send out to the organizations.

Senator SPENCER. You mean it is more economical to buy them as colts, and keep them until they grow stronger, and then train them in the meanwhile?

Major DALY. Yes, sir; because the trained, developed animal is then placed in the hands of the troops—an animal that is thoroughly trained—and the theory is that the service life of the animal is longer.

Senator HARRIS. What would it cost a head to keep them a year?

Major DALY. I have not figures on that point. I can get those figures. Records show that the colts are on the average given training four to five months. They are rarely held at the remount depots more than six or seven months. After the period of training the animals are placed on pasture until issued to the organizations. Based on the cost for the period referred to the cost of keep per head for one year would average \$75. This cost does not include the cost of enlisted personnel, as such personnel are receiving at the remount depots a part of their military training which would have to be given whether we had remounts or not.

Senator HARRIS. I should like to see those figures.

Senator SUTHERLAND. Where are your four remount stations?

Major DALY. Front Royal, Va.; Fort Keogh, Mont.; Fort Reno, Okla.; and Fort Robinson, Nebr.

Senator LENROOT. What age horse do you begin to train?

Major DALY. We buy colts 3 to 3½ years old.

Senator LENROOT. Do you begin to train them as soon as you buy them?

Major DALY. Yes, sir.

Senator HARRIS. How much difference is there between what you have to pay for a colt and what you have to pay for a horse?

Major DALY. There is some difference. Under an agreement made with the farmers, under a plan of the Bureau of Animal Industry, we pay \$150 each for colts (3 years old) sired by stallions owned by the remount service, while the average price for cavalry horses is \$175 per head and for Artillery horses \$200 per head.

Senator LENROOT. What is the average life of a horse in peace times in the Army?

Major DALY. I think 12 years is the service life or period of durability, sir.

Senator LENROOT. In actual use?

Major DALY. Yes, sir.

Senator LENROOT. Including the two years of training?

Major DALY. Including the period of training.

Senator SUTHERLAND. How young do you buy these horses?

Major DALY. We buy colts between 3 and 3½ years old. As I recall the figures, the service life of the horses bought from contractors and delivered directly to the organization is six to seven years.

Senator SUTHERLAND. You ought to buy yearlings cheaper than 3-year-old horses.

Major DALY. We pay \$175 to \$200 for a seasoned horse.

Senator SUTHERLAND. What are you paying now for the colts that you speak of?

Major DALY. We are paying \$150 each.

Senator SUTHERLAND. The price has gone down, has it?

General ROGERS. We have not bought any, you know, for two years now.

Senator SUTHERLAND. Oh, you have not?

General ROGERS. No, sir. No money at all is appropriated in this bill for that purpose.

ORDNANCE AND ORDNANCE STORES.

Major DALY. On page 29, lines 1 and 2, following the semicolon on line 1, "materials for cleaning and preserving ordnance and ordnance stores," we desire to insert the words "except at establishments under direct control of the Chief of Ordnance."

Senator SPENCER. We are going back, are we?

Major DALY. Yes; I overlooked that. That should be added after the words "ordnance stores."

Senator LENROOT. How many posts will that include?

Major DALY. That includes all of the arsenals that are under the control of Ordnance. I do not know just how many of those arsenals there are, sir. The Quartermaster General is required to furnish cleaning and preserving materials for all of the troops and equipment in the hands of troops; but at the arsenals and plants under the control of Ordnance, the Ordnance will furnish them from their appropriations.

Senator LENROOT. Has what you desire been done under this paragraph before, or is that something new?

Major DALY. No; this has been added.

Senator LENROOT. Actually added?

Major DALY. Yes, sir.

Senator LENROOT. Where has that been paid for heretofore?

Major DALY. We have been handling it for the last year, sir, out of our appropriation.

Senator LENROOT. Out of this appropriation?

Major DALY. O, yes, sir; out of that appropriation.

Senator LENROOT. Was this clause in the present law? Is this current law?

Major DALY. No; it is not current law. This has been added by the House.

Senator LENROOT. But, without its being specified in the paragraph, you have been doing it?

Major DALY. We have been furnishing them to troops, but there has been a controversy in the department as to whether we should not furnish them to arsenals. To get the matter fixed definitely, we are asking to have it inserted.

Senator LENROOT. My question was, if the bill is amended as you desire, it will really be doing what you are now doing?

Major DALY. Yes, sir.

Major BROWNE. I should like to invite attention to the fact that when the Ordnance Department was before the committee the other day we made a suggestion of a change under the appropriation entitled "Ordnance stores and supplies," which fits in with the change which Major Daly has just suggested.

CLOTHING AND EQUIPAGE.

Major DALY. The next appropriation is on page 31, "Clothing and equipage." The amount required for 122,000 men is \$5,000,000.

Senator SPENCER. That is the House appropriation?

Major DALY. Yes, sir. For 132,000 men, the same will be required: for 156,000 men, \$5,197,444.

Senator LENROOT. How does it come that the amount is the same?

Senator SPENCER. Is that because of the supplies you have on hand?

Major DALY. We are using the excess clothing and equipage on hand. It is reflected in this estimate.

Senator SPENCER. You have enough for the first two?

Major DALY. If we had no clothing on hand, the total amount that would be required for an Army of 156,000 men would be about \$14,000,000, and we are absorbing \$9,000,000 of that by the use of the stock of clothing on hand.

Senator LENROOT. What items here are not governed, then, by the size of the Army? There must be some items that are not affected by a difference of 10,000 men in the Army; otherwise, the appropriation would not be the same.

Major DALY. The only money we are expending for actual clothing is to fill in sizes that are deficient. We have an enormous stock of clothing on hand.

Senator LENROOT. If that is so, does not the size of the Army affect that item?

Major DALY. It should to a certain extent; yes, sir; but not to a great extent. This is just an arbitrary estimate, as a matter of fact. We feel that we can take care of an Army of 132,000 men without any greater appropriation than for 122,000.

Senator LENROOT. Then it amounts to this, does it not—that the House appropriation is a little larger than is necessary for 122,000 men, but in fact \$5,000,000 will take care of 132,000 men? Is not that what it means?

Major DALY. That is about what it means.

Senator LENROOT. Yes; I see.

Senator SPENCER. Major, certainly the operation of laundries and the issues of toilet articles and barbers' and tailors' materials would be substantially greater for 132,000 men than for 122,000.

Major DALY. The operation of the laundries might be, sir. The issue of the barbers' materials would vary to a certain extent, but not to a very great extent.

Senator SPENCER. Those are illustrations of items in this bill that would seem to be dependent directly upon the number of men provided for. Proceed with the next one.

Major DALY. We reduced the estimate, as you will note, for that appropriation. The amount appearing in the Budget was \$7,868,589, and that was cut on the floor of the House to \$5,000,000.

Senator SUTHERLAND. You have quite a good deal left over from the current appropriation, have you not, Major?

Major DALY. We probably will have, sir.

Senator LENROOT. Will that lapse?

Major DALY. Yes, sir.

Senator LENROOT. How much will you have left over?

Major DALY. I am not able to tell offhand now; probably in the neighborhood of \$600,000 to \$700,000.

Senator SUTHERLAND. Was not the appropriation for the current year \$12,000,000?

Major DALY. Yes, sir.

Senator SUTHERLAND. You stated before the House committee that you only spent at that time \$3,945,000; surely you did not spend the difference between that and the \$12,000,000, in this short time; did you?

Major DALY. We have obligated to March 11th, \$5,742,796.

Senator SUTHERLAND. That would leave nearly \$6,000,000?

Major DALY. Yes; but beginning now and running for the next three months we will place at our depot at Philadelphia orders for the manufacture of many articles of clothing. Most of our purchases are made in the spring and in the fall.

This does not include obligations that have been incurred since March 11 for orders we have placed at the Philadelphia depot for the manufacture of clothing. I can amend that, though, and put it in.

In addition to that, the Quartermaster General does not get the full \$12,000,000 appropriated for expenditure by him; there is held out of that appropriation the reserve that the Secretary of War takes out, that is set up by him. As I recall it there is about \$1,890,000 for the reserve, so that the amount that is allocated to the Quartermaster General for expenditure is the difference between \$1,890,000, and \$12,000,000.

Senator SUTHERLAND. Almost \$2,000,000?

Major DALY. Yes, sir; so that the Quartermaster General had practically to expend \$10,000,000. Then there is the probable saving of \$700,000, but we are not in position to know at this time just how much it will be until we have gathered in all of the reports of savings for the past three quarterly periods of the fiscal year.

Senator LENROOT. I do not understand how, as we get farther away from our large surpluses, that your cost is reducing; I should think it would increase rather than reduce under the circumstances; in other words, as the years go by you will have to buy more and more. Will you not?

Major DALY. Yes; as the years go on we are going to be compelled to increase this appropriation.

Senator LENROOT. That is what I thought. I would not expect there would be a reduction next year over this year.

Major DALY. Yes; there is, Senator, for the reason that I feel quite certain, in the estimate that was submitted for this year, full consideration was not given at the time of the estimate to the socks on hand, which has been done this year; we have been very careful and made a very careful survey.

Senator LENROOT. I see.

Major DALY. And that is the reason for the apparently great difference between the estimates for the two years.

Senator LENROOT. All right; I would like to ask you about that proviso there—that same question comes up: What do you understand by the language, “at average current prices,” etc.?

Major DALY. Well, that proviso is law now for this year.

Senator LENROOT. Well, if it is a law, just how are they to arrive at prices under that language?

Major DALY. I do not know; we have not yet received instructions about it. Under the law the Secretary is going to determine the selling prices of the articles in the stores. Now, I presume that the proviso has been so construed that the War Department has been authorized to include in the cost price a percentage to include the overhead, and yet not sell the articles at a price higher than they are sold commercially at the average Piggly Wiggly stores and Old Dutch markets.

Senator LENROOT. Those current prices are prices paid by the Government?

Major DALY. Yes, sir.

Senator SPENCER. Will you take up the next item, Major.

Major DALY. I made a misstatement, Senator, when I stated in the item just read that this proviso was the current law; it is not the current law. The current law provides for the issue and sale at average current prices to be determined and fixed by the Secretary of War; that is the law.

Senator LENROOT. That is different. I understand that applies all the way through.

Senator SUTHERLAND. Where is that?

Senator LENROOT. Page 32, line 12.

Major DALY. The next item, sir, is incidental expenses, page 32, line 14.

AMOUNT REQUIRED UNDER "CLOTHING AND EQUIPAGE" FOR ARMY OF 156,000 MEN.

Senator SUTHERLAND. Before you leave that other item, what would be that item based on an Army of 156,000, then?

Senator SPENCER. \$5,197,440.

Major DALY. \$5,197,444 for an Army of 156,000 men.

Senator SPENCER. \$5,197,444?

Major DALY. Yes.

Senator LENROOT. I would like to ask you this: Would not the difference between 132,000 and 156,000 take the same percentage as between 122,000 and 132,000?

General ROGERS. It is very hard to give a percentage, Senator, because there are certain amounts, of course, that remain the same; then, as I said before, with certain items we can give you a percentage; on others we can not.

Major DALY. Here is one difference, Senator.

Senator LENROOT. So if we had any other-sized Army we would have an additional increase in the appropriation?

General ROGERS. Yes.

Major DALY. Take the item of fuel: In reducing the number of men it does not necessarily reduce the consumption of fuel, because it takes just as much to heat a barracks for 60 men as it does for 100.

Senator LENROOT. Certainly.

INCIDENTAL EXPENSES OF THE ARMY.

Major DALY. For an Army of 122,000 men, \$5,000,000; for an Army of 132,000 men, the same; for an Army of 156,000 men, \$5,365,567.

Senator LENROOT. How much?

Major DALY. \$5,365,567. The estimate for that in the budget is \$5,446,410; the House passed an appropriation of \$4,750,000.

Senator SPENCER. Now, Major, what is it that makes the cost of an Army of 132,000 men precisely the same as for an Army of 122,000 men?

Major DALY. That appropriation, sir, is largely a service appropriation; there are not any supplies involved in it.

Senator SPENCER. Is it not true that either the estimate for 122,000 men is very liberal or that the estimate for 132,000 men is under the required amount?

Major DALY. No.

Senator SPENCER. Certainly these incidental expenses, as you read them over—for instance, the money necessary for the recapture of deserters certainly amounts to more.

Senator LENROOT. And the expenses of recruiting?

Senator SPENCER. Yes; and the expenses of recruiting must be substantially different on the basis of 132,000 men from what they would be on the basis of 122,000 men.

Major DALY. Well, in the matter of employees, sir, perhaps there would be no difference, because the same number of employees required to take care of 122,000 men would not have to be increased to

take care of 10,000 additional men; it would make no change in the number of additional employees required.

Senator LENROOT. It would make a difference in the recruiting, certainly.

Major DALY. Perhaps there would be a difference in the recruiting service.

Senator LENROOT. There would be a difference in desertions.

Major DALY. The desertions would not materially increase it, not in 10,000 men, considering the percentage of the 150,000—

Senator LENROOT (interposing). Certainly there must be a given percentage of desertions per thousand men.

Major DALY. Well, there are; yes, sir.

Senator LENROOT. Yes; and 10,000 would just mean that percentage more.

Senator SPENCER. There would be a difference caused by the troop movements and operations.

Major DALY. Of course, the number of desertions is not the expense itself, but the apprehensions.

Senator LENROOT. I know; but the apprehensions depend on the number of desertions.

Major DALY. Of course, the apprehensions vary, dependent altogether on the activity of the civil authorities.

Now, as to the matter of recruiting stations, I am not inclined to think that there would be any great difference in that service between 122,000 and 132,000, because the same number of stations would be maintained; there would be no increase in the number of stations.

Senator SPENCER. But you would not need them as long with an Army of 122,000 as you would with an Army of 132,000.

Major DALY. Well, they are maintained constantly.

Senator SPENCER. The movement and operations of the Army and at military posts would be more extensive for a large Army than it would be for a smaller Army, would it not?

Major DALY. That item is to cover items that are not otherwise covered by law.

Senator SPENCER. Surely.

Major DALY. And the strength of the Army, of course, bringing the Army up to a very large strength would have some bearing on it, but an increase from 122,000 to 156,000 men would not make very much of a change in that particular item.

PRESENT STRENGTH OF ARMY.

Senator LENROOT. How many men have we got in the Army now?

Major DALY. About 140,000, actually.

Senator LENROOT. Exclusive of the Philippine Scouts?

Major DALY. Yes.

Senator LENROOT. That is 147,000. Now, if you reduced it to 122,000 you would not need to begin recruiting as soon as if you reduced it to 115,000, which is the reduction of the Army that is involved here, and not an increase.

Major DALY. Of course, Senator, that is a matter that would have to be discussed by the recruiting branch of The Adjutant General's office, because we do not know the plans as to recruiting, or what is in their minds, and our estimate for recruiting is based, of course,

upon the approximate figures they gave us; but there are details in connection with it with which we are not familiar.

Senator LENROOT. But it just can't be, as a matter of mathematics, that your cost is the same for 122,000 as it is for 132,000 and then jumps for 150,000 to the extent of \$365,500.

Major DALY. That \$365,500 was added at the direction of the Secretary of War in an indorsement dated January 14 to cover expenses which could not be anticipated; and I presume that he had in mind his Organized Reserves and civilian military training program; and, of course, we are not in a position to give any enlightening details as to the need for that \$365,500.

Senator LENROOT. Therefore, so far as you are concerned as to giving us detailed information, you have not any difference between 122,000 or 132,000 or 156,000, have you?

Major DALY. No. The largest item in the appropriation is for civilian employees, \$4,000,000, as I recall it, this figure will not change; it does not take any more civilian employees to handle an Army of 156,000 men than it does to handle an Army of 122,000.

Senator LENROOT. Then, at what point above 132,000 is it necessary to employ additional civilians?

Major DALY. When we get to about 200,000 you would have to increase the number of civilian employees.

Senator LENROOT. Then your estimate for 156,000 would be \$5,000,000 just the same?

General ROGERS. I think one big item, Mr. Chairman, civilian employees, is the biggest that you have; you see we have reduced our depots; we have put a great many on the inactive list, and we have reduced the depots down to as low a point as we can and function at all, and it will be a little more reduced as soon as we get rid of our surplus property; but until we get rid of it we have got to keep them.

Major DALY. If the Army were on the basis of 200,000 men, of course, our civilian employees would have to be increased.

Senator LENROOT. Certainly.

Major DALY. But with this number of men we would not have to have additional employees.

Senator LENROOT. We understand, then, that except for some reason the Secretary of War may have for the \$365,000, \$5,000,000 will cover this item regardless of the size of the Army contemplated?

Major DALY. Yes, sir.

TRANSPORTATION OF THE ARMY AND ITS SUPPLIES.

Senator LENROOT. What page of the record is this item on?

Major DALY. Page 33, line 8; for an Army of 122,000 men, \$17,000,000.

Senator SPENCER. Now, you are referring to the figures on page 36, line 17?

Major DALY. Yes, sir.

Senator SPENCER. All right, how much; \$17,000,000?

Major DALY. Yes, sir; for an Army of 132,000 men, \$17,083,745; for an Army of 156,000 men, \$21,000,000. The estimate in the Budget is \$20,738,037.

Senator SPENCER. Is that based on the strength some of the other ones were?

Major DALY. Yes.

Senator SPENCER. And you make the same suggestion that the corrected estimate come in?

Major DALY. Yes, sir.

Senator LENROOT. At that point I would like to have you explain why there is an increase of only \$83,000 for an increase of 10,000 men, while for an additional increase of 14,000 men there is an increase of \$4,000,000?

Major DALY. Well, there is not any real explanation for that; that figure is merely an estimate.

Senator SPENCER. That is the same conclusion I have arrived at.

Major DALY. That figure is merely arbitrary in order to keep within the amount of money that we are required to keep within for the total of the estimate, and it is based largely on the judgment of the Quartermaster General—based on the experience of past years as to what he can do.

I could not justify a slight difference of \$83,745. for 14,000 men. for transportation; the chances are that we can probably do all that is to be done in the way of transportation for the \$17,000,000. This is an appropriation that is absolutely subject to administrative control; and if we had only \$17,000,000 we would have to reduce the movement of our troops and other personnel accordingly, so as to keep within the amount of money fixed.

Senator LENROOT. It was reduced below the appropriation for the current year?

Major DALY. Yes, sir.

Senator LENROOT. You will not spend that much?

Major DALY. No, sir.

Senator LENROOT. Can you give us just what the figures are?

Major DALY. Well, expenditures this year are going to be pretty high.

Senator LENROOT. I thought there was a very drastic order issued on transportation.

Major DALY. There is. Our total figures to March 11 is \$23,737,932.

Senator LENROOT. You will take practically all the appropriation?

General ROGERS. Yes; very nearly; we will have hardly enough to get through.

Major DALY. There is a provision of law in the current appropriation act that permits the Secretary of War to transfer from the appropriations "Subsistence of the Army, Regular—supplies, incidental expenses, clothing, and equipage" such amounts as may be necessary for the purpose of Army transportation, and there has been taken from this appropriation and set aside for the purpose, \$6,186,000, as I recall it; and a good portion of that has been applied to transportation. Transportation is heavy this year because of the necessity for removing large quantities of supplies from the camps we are disposing of and putting the supplies in storage and moving up the excess supplies at posts and camps to camps and posts where needed.

Senator LENROOT. In case the posts should be further reduced, that would also increase this expenditure?

Major DALY. Yes, sir.

Senator SUTHERLAND. This also covers transportation of men?

Major DALY. Yes, sir.

Senator SUTHERLAND. What orders have been issued tending to reduce that expenditure below what has been accustomed to be spent?

Major DALY. Well, the War Department has taken action toward restricting the travel of personnel to actual necessities; the orders on that subject are quite stringent.

Senator HARRIS. Even requiring officers to pay their own traveling expenses when they are transferred from one post to another in certain cases, which I think is very wrong.

Major DALY. And the plan of operation under the orders of the War Department as to the movement of supplies, etc., is restricted to the amounts fixed for the purpose. Corps area commanders and others can not exceed the amount allotted. As a matter of fact, the Secretary of War has the appropriation "Army transportation" well under his control and has been successful in reducing expenditure.

Senator LENROOT. A very considerable expenditure is occasioned by the return of our troops from Germany?

Major DALY. Yes, sir; the largest part.

Senator LENROOT. And that, of course, will not be needed next year?

General ROGERS. I could say for the information of the committee that the method that is adopted by the General Staff is this: They have orders from General Pershing to send over these tentative orders covering the large movements of troops, and then they are worked out in my office and recommendations made as to the manner of travel; and in some cases we recommend that the troops march a certain distance and save money that way.

Senator SUTHERLAND. Have orders actually been issued for the return of all the soldiers now in Europe?

General ROGERS. I do not know that it has been published, but they are on their way home. We expect to have the last of the troops land in New York on the 3d of July. Of course a small number of men in the Quartermaster Corps will have to remain over there until the surplus property is disposed of.

Senator LENROOT. What is the next item?

General ROGERS. The next item, Mr. Chairman, is on page 37, line 10. Now, in connection with that, sir, I want to pass it so that we can have the construction people here to testify about that appropriation, and the other appropriations having to do with construction, military posts, barracks and quarters, roads and walks; there are many details in there; there are certain increases being asked for which they will have to explain because I am not familiar with all of the details, and they are familiar with them; and so, with your permission, sir, if we could pass to horses for cavalry, artillery, engineers, etc.

Senator SPENCER. All right. How much more of this do you expect to have?

General ROGERS. Probably we can finish this appropriation this afternoon at the rate we are running.

Senator SPENCER. We will hear what you have got, General, what you are prepared on.

General ROGERS. All right, sir; and the construction item will be taken up at 2 o'clock this afternoon.

Senator SPENCER. Two thirty, our usual hour.

HORSES FOR CAVALRY, ARTILLERY, ENGINEERS, ETC.

Major DALY. The next item is line 22, page 37, "Horses for Cavalry, Artillery, Engineers, etc." The total asked for is \$180,000 for 122,000 men; \$180,000 for 132,000 men.

Senator LENROOT. No difference.

Major DALY. And \$290,257 for 156,000 men.

Senator SUTHERLAND. The first two are the same?

Major DALY. Yes, sir.

Senator SUTHERLAND. How much was the last item?

Major DALY. \$290,257 was what we estimated for in the Budget, and the House allowed \$180,000.

Senator LENROOT. That is based on an Army of 156,000 men.

Senator SPENCER. We will continue the hearing this afternoon at 2.30.

(Thereupon, at 12.03 o'clock p. m., a recess was taken until 2.30 o'clock p. m.)

AFTER RECESS.

The committee resumed, pursuant to the taking of recess.

Senator SPENCER. What is the next item?

Major DALY. The next item will be water and sewers.

Senator SPENCER. All right, Major.

Major DALY. Mr. Chairman, before we take that up, sir, I would like to go back and straighten out a matter here that was more or less confused this morning, due to my testimony.

Senator SPENCER. Back to what page?

AUTHORIZED ISSUES AND SALES OF SUBSISTENCE.

Major DALY. Page 27, lines 11 to 21. It will not take very long to handle that, sir.

The language from lines 11 to 21, inclusive, is objectionable, and the Secretary of War has written a letter to the chairman of the House Military Affairs Committee on the subject, a part of which I will read to you, if you please, sir, which will explain his objection to it. It is not very long:

At present the law provides for sales at the last invoice price to the Government. This involves a uniform method to be applied to all stations. Application of this provision will cause a different price at each station. It is thought that Congress intended that these rates to Army personnel should be made less the freight charges at remote stations where it is necessary for the Government to provide supplies for personnel. To apply this provision to such stations as Alaska, Philippine Islands, Hawaii, Panama Canal, and at remote posts in the United States, will be a great hardship to the officers and enlisted men, and will, in fact, operate to reduce their pay in the added expense of living. The provision will set up a considerable bookkeeping system necessary to recoup or reimburse the proper division in the necessary collection of proceeds of sale.

Now, if it is intended to legislate on the subject and not eliminate the House action entirely, we offer the following substitute, which

we think will give the Secretary of War the necessary power to do what was in the minds of the House committee.

Senator SPENCER. Is this different from what you offered this morning?

Major DALY. Yes; it is clearer.

Senator SPENCER. All right; put it in.

Major DALY. It reads, "that hereafter the authorized issues and sales of subsistence, clothing, and other quartermaster supplies shall be at prices to be determined and fixed by the Secretary of War."

Now, in addition to that, it will be necessary, if this is accepted, to eliminate also lines 10 to 13, page 32.

Senator SPENCER. And put that same substitute in there?

Major DALY. Yes; I would put that substitute in there and it will cover all.

Now, in accordance with your request of this morning, I am submitting a statement in detail of the various appropriations discussed, showing the amounts required for the purpose for 132,000 men, for 156,000 men, and the amount passed by the House, for insertion in the record.

Senator SPENCER. Very good.

Major DALY. Together with a total of the reduction of civilian employees. (See page 705.)

WATER AND SEWERS AT MILITARY POSTS.

Senator SPENCER. On page 37, water and sewers at military posts.

General ROGERS. General Carson has charge of that service, Mr. Chairman.

STATEMENT OF BRIG. GEN. J. M. CARSON, QUARTERMASTER CORPS, ASSISTANT QUARTERMASTER GENERAL, IN CHARGE OF CONSTRUCTION SERVICE.

General CARSON. Under water and sewers the estimate in the Budget was for \$1,900,000. The reallocated amounts subsequently made by the War Department, submitted to the committee, gave a total of \$2,500,000, and that is the amount that we believe is absolutely necessary in order to enable us to take care of the properties occupied by the War Department and the operation of water and sewer systems and all the expenses connected therewith.

The appropriation, as it finally passed the House of Representatives, was for \$1,750,000, which is \$750,000 below the amount that we believe is required.

Senator SPENCER. General, can you secure from the Budget an estimate higher than \$1,900,000?

Major BROWNE. Mr. Chairman, the remarks I made this morning apply to these items—yes, sir.

Senator SPENCER. They are all based on a mistake?

Major ROGERS. Yes, sir.

General CARSON. That is what I meant by the reallocation of funds.

Senator SPENCER. Yes, sir.

Senator JONES. Let me ask you, General, if you have in mind that provision in the Budget law that prohibits any officer or head of

the Government coming down and asking more than the Budget recommends?

Senator SPENCER. That does not apply to this. This does not increase the amount at all. It is a mere allocation of the total amount.

Senator JONES. They are asking for two and one-half million, when the estimate is only \$1,750,000.

Senator SPENCER. But they will take it off from some other item.

Senator JONES. But they are increasing this item.

Senator SPENCER. No; this is a part of the gross item a little further on—the total amount for the Quartermaster's service.

Senator JONES. But there is an estimate came down for this particular item, water and sewers at military posts, \$1,900,000. Now, then, they are coming here asking for \$600,000 more, which they are prohibited from doing except upon request of one of the Houses of Congress.

Major BROWNE. May I make a statement there, Mr. Chairman?

Senator JONES. I am merely making that statement to call it to your attention.

Senator SPENCER. We are making the request.

Senator JONES. We have not authority, even as a committee, to do it. It must be done by either of the Houses of Congress.

Senator SPENCER. But I mean for information. We have asked a great many witnesses for information.

Senator JONES. We can ask them for information, but they have asked us for \$600,000 more than the Budget estimated.

General CARSON. As I understand it, there is no increase in the total amount, but this is one of the items of the total amount.

Senator JONES. For which an estimate was sent down of \$1,900,000. That is all that was estimated for that.

Senator SPENCER. Senator, the Budget, in allocating the gross amount, made a mistake in the allocation.

Senator JONES. They ought very easily, then, get a statement down from the office of the Budget.

Senator SPENCER. That is what they ought to do.

Senator JONES. We need not spend any time. I have just called this to your attention, and I think myself the law ought to be followed.

General ROGERS. That all came out this morning, Senator, and we are going to submit a new estimate.

Senator SPENCER. The Budget is going to submit an entire new estimate.

Captain CHAPPELL. Mr. Chairman, the total amount will not be exceeded. We were authorized to submit an estimate for \$73,000,000. That estimate was put in some time ago, when subsistence was higher than now. Subsequently we were able to reduce subsistence and increase some of the other items.

Senator JONES. Captain, I have a very decided opinion that the law covers this case, whether your aggregate covers it or not. There was an estimate of \$1,900,000 sent for this purpose and under the law you have no right to come here and ask for any more unless Congress asks you to do it. If you are going to get a supplemental estimate all right, go ahead.

Captain CHAPPELL. They are coming in.

Senator JONES. I think that law ought to be complied with by the officers of the Government, and I think Congress ought to insist upon compliance with it, because if we are going to disregard it everybody is justified in disregarding the law.

ELIMINATION OF LIMIT ON NEW CONSTRUCTION WORK.

General CARSON. The phraseology under this same item, water and sewers at military posts has a provision at the end:

Provided. That not to exceed \$10,000 of this appropriation shall be expended for new construction work.

We would like to have that eliminated as it interferes a great deal with some construction that becomes necessary in connection with water and sewer systems.

Senator SPENCER. How much do you need for new construction work?

General CARSON. That is hard to estimate. There may be new construction in one sense in the way of improving or replacing existing systems. It is a provision that was inserted recently, and during the past year—the first time it has been in operation—it has embarrassed us a great deal in meeting necessary demands.

Senator SPENCER. Perhaps, Senator Jones, in his wider experience would know better; but, I think, perhaps the reason for it is that the House feared new construction might be started if there was no limit to the amount; and, having once been started and the door opened with the animal's nose in, other portions of the animal might follow.

General CARSON. Well, there is an absolute bar on any such advantage being taken of the appropriation by the amount of the appropriation.

Senator SPENCER. But you could start a great deal with \$1,750,000.

General CARSON. We could not with the demands made upon us to keep in shape all the systems at the various stations. In other words, it is a physical and practical impossibility to start any new construction.

Senator SPENCER. If there was an objection to striking that clause out how much would help you? How much did you spend last year?

General CARSON. We spent nothing last year in new construction.

Senator SPENCER. What amount would meet any reasonable need?

General CARSON. I should say \$25,000 would take care of it. It is mostly to meet emergencies that come up.

Senator JONES. Will you give us some instances, General, where this limitation would have injured you?

General CARSON. One instance that occurs to my memory is the target range for the troops stationed at Fort Bliss, Tex. Through the growth of the town the old target range, which is also somewhat limited, is unusable. The Government owns quite a large tract suitable for the purpose some 25 or 30 miles from the post. We can not use it because we can not provide water. We must have water, and the lowest estimates we have received to provide a suitable water supply is \$14,000 or \$15,000, so we could not, under this restriction, allot any funds to do that work which is necessary, with the result that the troops in that particular station—two regiments of Cavalry

and one of Field Artillery are there now, and some auxiliary troops—have no target range to carry on training because of inability to use this available ground.

Senator JONES. So you are not training that way at all?

General CARSON. Not at that post unless they have marched the troops for a considerable distance. I do not know about that.

Senator JONES. You think \$15,000 would take care of the situation there?

General CARSON. Of that particular one, yes. We have so many demands made upon us from this water and sewer appropriation that we are resisting any attempt to use it for large projects; otherwise systems at existing stations would go out of commission. So that the limitation of the total amount is the strongest bar to any expenditures for new construction that could be created.

Senator SPENCER. What is the next item?

General CARSON. The next item is on page 39.

MILITARY POSTS.

General CARSON. Military posts. Under that appropriation would come the construction and enlargement at military posts, as indicated by the language of the bill. It provides a total, as stated here, of \$916,000 for four specific projects which are mentioned, and limitation of costs placed upon each.

CHANGE OF NAME FROM CAMP BENNING TO FORT BENNING.

Taking up the first one for Camp Benning, now called Fort Benning, as it is a permanent post, and the big station for the training of Infantry—

Senator JONES. Should we change that name?

General CARSON. I think so; yes, sir.

Senator SPENCER. Has it been formally designated?

General CARSON. It has been formally announced by the War Department as Fort Benning.

Senator SPENCER. Very well.

CONSTRUCTION WORK, CAMP BENNING.

General CARSON. We desired originally \$400,000 for continuing the construction at Camp Benning. At the same time there was an item of \$85,000 for completing the construction of hospital at Camp Knox. Subsequent to the preparation of this estimate of \$85,000 for Camp Knox certain changes were made in the garrison which reduced it and rendered that item unnecessary. That was so reported to the appropriations subcommittee of the House, and we asked that it be added to the \$400,000 at Benning, so as to give us \$485,000 at Benning to continue the work.

Senator SPENCER. What was the estimate of the Budget on these military posts?

General CARSON. It was \$916,000, I think, sir; yes. And a subsequent estimate increased it by \$198,000, given on line 19, but the House committee inserted the \$198,000 for the work at Leavenworth and then took it off the other total. If they had followed the estimates

of the Budget it should have been \$916,000 plus \$198,000. You will notice the elimination of the \$85,000 at Knox and the reduction of the general construction at Dix, Meade, and Lewis equals \$198,000.

COMPLETION AND ENLARGEMENT OF BARRACKS AT FORT LEAVENWORTH.

Senator SPENCER. What do you want to do with the appropriation on page 40 of \$198,000 for the completion and enlargement of barracks at Fort Leavenworth?

General CARSON. That is what I means, sir. I have the copy of the bill before me on which I have made some notes, and it is on page 39 of the copy I have. It is page 40 on your copy.

Senator SPENCER. What do you want—that out?

General CARSON. No, sir; I would like that added to the appropriations to increase that amount.

Senator SPENCER. You mean \$916,000?

General CARSON. Plus \$198,000; yes, sir; that would restore the items we put in originally in the Budget, raising the \$262,000 for general construction at Dix, Meade, and Lewis to \$376,000 and increasing the \$400,000 at Benning to \$485,000.

Senator HARRIS. You are going a little too fast for me. \$916,000 you want increased by \$198,000?

General CARSON. Want increased by \$198,000, which would make \$1,114,000.

Senator SPENCER. And is the Budget estimate \$1,114,000?

General CARSON. A later estimate from the Budget added this \$198,000. Then we want to restore the Benning item to \$485,000.

Senator HARRIS. What is it you want for the increase in that?

General CARSON. \$85,000.

Senator HARRIS. I mean for what purpose?

General CARSON. For continuing the construction of the post at Camp Benning—officers' quarters largely, in which they are very deficient.

Senator HARRIS. Is that estimated for in the Budget?

General CARSON. Yes.

Senator JONES. You said you asked for \$400,000 for continuing the construction of the post at Camp Benning?

General CARSON. Yes, sir.

Senator JONES. And then you asked \$85,000 for some other purpose?

Senator SPENCER. Camp Knox.

General CARSON. The original estimate contained an estimate of \$85,000 for completing the hospital at Camp Knox.

Senator JONES. Now, Camp Knox is separate from Camp Benning?

General CARSON. Yes.

Senator JONES. As you cut it out from Camp Knox you now want to put the \$85,000 in on Camp Benning?

General CARSON. I want to add it to Camp Benning.

Senator JONES. Do you consider that imperative?

General CARSON. I do; yes, sir.

Senator JONES. Why did you not reach that conclusion first?

General CARSON. Because we were limited to a certain amount, which we distributed at the time as we thought best; later—after

that was done—the plans with reference to Knox were changed by the War Department so that the garrison was reduced, and the completion of certain parts of the hospital was found unnecessary owing to that reduction.

Senator SPENCER. That is, when you had the Camp Knox Hospital up before you, you thought that was more important than an addition to Camp Benning over the \$400,000?

General CARSON. At that time.

Senator SPENCER. When the Fort Knox dropped out, then the necessity of the \$85,000 for Benning came in?

General CARSON. Yes, sir.

Senator JONES. It was not any more necessary then than it was before.

Senator SPENCER. Except relatively.

General CARSON. Except relatively at the time the provision was made.

Senator JONES. That does not appeal very much to me, General, to be quite frank with you.

General CARSON. We would have liked to have had more at Fort Benning, but were limited to this total.

Senator JONES. You want to raise the \$262,000 to \$376,000?

General CARSON. Yes; that was in the Budget and was reduced by the House bill before the committee.

Senator SPENCER. Does that leave out Fort Leavenworth?

General CARSON. No, sir.

Senator SPENCER. That is right.

General ROGERS. May I make an explanatory statement, Mr. Chairman?

Senator SPENCER. Yes, sir.

General ROGERS. I would like the committee to know we have very little to say about these projects. These are all formulated by the operations division of the General Staff and approved by the Secretary of War, then we simply work them up in detail.

Senator JONES. I want to know myself the necessity for increasing the \$262,000. Could you not get along pretty well with the \$262,000 for general construction at these camps?

General CARSON. I will read to you a condensed statement I have here that I think is to be found on page 611 of the hearings before the House committee, and I will repeat it here.

Senator JONES. You have nothing to add to your House statement?

General CARSON. No, sir.

Senator JONES. You need not read that.

Senator HARRIS. What is important that you insist on at Camp Benning, General? I am not familiar with the situation.

General CARSON. Under an act of Congress of February 28, 1920, it is provided that Camp Benning will be used as an Infantry school. The main features of this school are the education of Infantry officers and noncommissioned officers of the Regular Army, National Guard, and Reserve Corps. The housing of these officers is being provided for gradually by the appropriations available for Camp Benning.

The appropriation proposed to be expended in the fiscal year 1923 will provide for approximately 55 sets of quarters for married officers and 10 sets of quarters for noncommissioned officers. The housing conditions at Benning are deplorable. It is so reported to us and

confirmed my personal inspection within the last few months. During the scholastic year of 1920-21 there were 929 officers at Benning. Nine of them were in quarters which may be classed as permanent; 3 were in old houses formerly occupied by farm laborers; 25 of the officers lived in houses erected by themselves, at their own expense; 593, or more than 60 per cent of the officer personnel, lived in tents, tent houses, old cantonment barracks, or tar-paper shacks; 299 officers lived in Columbus, Ga., 9 miles distant. The latter officers were forced to make daily trips back and forth to attend to their duties. Of course, the officers living in Columbus collected full commutation of quarters. This condition is not improving materially since the Chief of Infantry reports that there are 898 officers present for duty who are quartered as follows:

In tents.....	96
In Columbus, Ga., on commutation.....	212
In tent houses.....	43
In 4-room apartments.....	120
In bachelor apartments.....	87
In personally owned houses.....	40
In barracks.....	265
In old frame houses.....	12
In 5-room bungalows.....	23
Total	898

The estimated cost of quarters for officers is based on constructing apartment buildings of suitable type. The buildings will be three-story brick structures, each heated by its central heating plant.

Of the 146 noncommissioned officers living in Benning at present who are entitled to quarters, 90 have families. Thirty-nine of those with families are in rented quarters in Columbus; 25 are housed in portable buildings on the reservation; 18 in negro shacks; 4 in small temporary buildings formerly used by the contractors; and 4 are in tents. The 56 bachelor noncommissioned officers are scattered about wherever they can find a place for a bunk. It is proposed to develop quarters for noncommissioned officers along with the development of housing for officers. The estimated cost of quarters for noncommissioned officers is based on providing apartment buildings of permanent construction. The estimated cost of quarters for commissioned officers is based upon providing apartment buildings of permanent construction.

We are using the permanent type as a matter of economy, because we can provide quarters for officers' families at a less net price than in separate buildings, and the original cost and cost of maintenance is much less than to scatter them as in the past.

Senator SUTHERLAND. What will this appropriation you ask for permit you to do in the way of giving needed room for officers?

General CARSON. The \$485,000 which we are asking for will provide for approximately 55 sets of quarters for married officers and 10 for noncommissioned officers of this apartment-house type. Four hundred thousand dollars, of course, will reduce the number of quarters to probably about 44 for officers.

Senator SUTHERLAND. That will only take care of a fraction of your needs?

General CARSON. Only a part; yes, sir. Of course the expectation is that this situation will be gradually remedied as time goes on.

We would like to have \$800,000 and do it quicker, but this will help. We originally asked, in sending our estimates of the War Department, for about \$724,000.

Senator HARRIS. What did the Budget approve?

General CARSON. The budget recommended \$400,000 for Benning, and then \$85,000 for Knox, but Knox is eliminated, because it is not necessary, and we have asked to keep it in the total but let us use it at Benning instead of at Knox.

COMPLETION AND ENLARGEMENT OF BARRACKS AT FORT LEAVENWORTH.

Senator HARRIS. The \$198,000 at Leavenworth, is that enough to take care of that situation?

General CARSON. Yes, sir; that is the estimate that is made, and is based largely upon using prison labor at Leavenworth in the manufacture of brick, digging of sand, common labor for building, etc.

Senator HITCHCOCK. Why is any additional building necessary at Leavenworth with a reduced Army?

General CARSON. This is for what is called the disciplinary barracks guard at Leavenworth. At the present time they are living in frame buildings that have been kept in repair and really were salvaged from the old cantonments during the war. The rest pertains to the school, and a number of the old barracks have been converted into officers' quarters, and what are left are occupied by the school detachments, and this pertains to what was formerly called the military prison, but is now called the disciplinary barracks.

Senator HITCHCOCK. But I am trying to find out why an enlargement is necessary with an Army now reduced to considerably less than formerly estimated?

General CARSON. I do not look upon it as an enlargement, sir, but rather to provide something that does not exist. They have not quarters of a suitable character and are living in temporary buildings.

Senator HITCHCOCK. How many men does that mean?

General CARSON. I think there are 400 or 500 men in that battalion; to be exact, 520 men. They are used in guarding the men who are sent to the disciplinary barracks to serve their sentences.

Senator HITCHCOCK. Do you know how many inmates there are in the disciplinary barracks?

General CARSON. I am not familiar with the last number, but I think it runs from 1,500 to 2,000.

Senator HITCHCOCK. And their guards number about 500?

General CARSON. These are the men over that number; yes, sir. They are not only guarding them, but many of them act as instructors and training them. Many of the prisoners, you might call them, they are endeavoring to rehabilitate.

Senator JONES. Quite a large percentage are permitted to do that, are they not?

General CARSON. Yes, sir. I was there last July and in what they call the vocational training battalion there were between 600 and 700 men.

Senator HITCHCOCK. It is somewhat of a misnomer. It says "Continuing construction and enlargement." That is not replacement.

General CARSON. That is because we want to utilize some foundations that were started there before the war and not finished—started by prison labor.

Senator HITCHCOCK. That renews that question, Why do you need enlargement?

General CARSON. Nothing exists except the foundations. We want to make use of them so as to save that much on expenditure, and this phraseology was put in so as to be able to satisfy the accounting officers.

Senator SUTHERLAND. Where do these men live now?

CONDITION OF PRESENT BUILDINGS.

General CARSON. In old frame buildings that were rescued from the cantonments in the south end of the post and moved up there; a sort of improvised quarters, not comfortable to say the least.

Senator SUTHERLAND. And deteriorating very rapidly?

General CARSON. Yes, sir; and affecting the morale of the guard battalion which it is quite important to keep up. Prior to 1917 the men forming the guard battalion were allowed extra pay because their duties are onerous and pretty hard, and that has been cut off, so they get the same pay as other enlisted men of the same grade in the Army receive, and in order to make up for that somewhat and make it as comfortable as possible, it is desired to put in permanent barracks rather than keep them in the temporary quarters where they are now.

Senator HARRISON. Is not 500 a pretty large number of guards for 1,500 in barracks like that?

General CARSON. I am unable to answer that question, sir; because I am not familiar with the operations of the prison.

I have a note here that General Harboard went into this in somewhat detail before the House committee, at page 1441 of the House hearings. I would much rather refer you to that because I am not familiar with the operations enough to comment on that.

Senator SPENCER. The total you want is \$1,114,000?

General CARSON. Yes, sir.

Senator SPENCER. That adds up all right. If you do not get that, is that \$916,000 that is now in the bill presumed to be the aggregate of the items that follow it?

General CARSON. Well, it is \$1,000 more, I find, than the aggregate of these four items.

Senator SPENCER. A mistake in addition?

AUTHORITY TO BUILD APARTMENT HOUSES AT A LIMIT OF COST OF \$175,000.

General CARSON. I hope you will not change that mistake, sir.

And in that connection, and even assuming that the figures as they are in the bill before you remain, we would like to have this proviso inserted after the word "Georgia." on page 39, line 23—insert this provision:

Provided, That apartment buildings may be constructed at a cost not to exceed \$175,000 each.

That is asked for because of the existing statutory limitation of \$20,000 on any new building without specific authorization of Congress.

Senator SPENCER. Do you think it would do to indicate an apartment house for a certain number of families?

General CARSON. I am perfectly willing, yes; not less than 18 families. The estimate is based on 18 families.

Senator SPENCER. To provide for not less than 18 families?

General CARSON. I would rather have it not less than 16, because you can not always predict six months ahead just what prices are going to be.

Senator SPENCER. To provide for not less than 16 families?

General CARSON. Yes. Of course, we will get all we can out of them, naturally.

And on page 40, after the word "Lewis," in line 1, the provision:

Provided, That apartment buildings may be constructed at a cost not to exceed \$32,000 each.

That applies to the construction work at the three camps mentioned on that line there. We probably will put apartments in each building.

Senator JONES. General, that is a change in the law, is it not? I understood you to say the law did not permit you to do that now?

General CARSON. It is not a change in the law, sir, because, as I recall the phraseology, the law says no new buildings shall be erected exceeding in cost \$20,000 without specific authorization of Congress. We are asking for the authorization to exceed that amount for this specific purpose.

Senator JONES. In other words, it is new legislation?

General CARSON. Well, I do not know, sir. I assumed it was not.

Senator JONES. We will have to look into that pretty carefully because we have a new rule now that if it is subject to a point of order it would send the whole bill back to the committee.

General CARSON. We have gotten such authorizations in the past.

Senator JONES. I know, but we have different rules from what we had in the past.

Senator SUTHERLAND. I notice General Harboard states they have 356 in that guard out there. He states further that the old barracks burned down, and that they used some temporary barracks since then.

General CARSON. That is true; yes.

Senator SUTHERLAND. And they have the grading done up to the foundation, and the foundation partly built for a new barracks.

General CARSON. That is quite true. That particular work to which you refer was started, I think, in 1917 or 1918, somewhere in that neighborhood, at a time when there were many more prisoners in the barracks than there are now or were last year. They were not able to go as far as they expected, and had to stop; they could not get any money for it, and it is just standing there.

Senator SPENCER. What is your next item?

General CARSON. Military posts, Hawaiian Islands.

Senator SPENCER. Page 40.

MILITARY POSTS, HAWAIIAN ISLANDS.

General CARSON. In the estimates as presented through the Budget there was a total of \$1,059,489 asked for construction at military posts in the Hawaiian Islands, and that was based upon the number of

storehouses, magazines, sheds, etc., required, amounting to \$659,490; development of the water supply by starting the construction of an additional reservoir, \$200,000; and refrigerating plant—\$200,000 toward the construction of that plant of which the estimated cost was \$231,500. I have those in detail if you wish to hear them. I think that they are all set forth, however, on page 627 of the House hearings.

Senator SPENCER. They are.

REFRIGERATING PLANT.

General CARSON. On page 632, with respect to the refrigerating plant. The amount allowed by the bill as it passed the House, \$150,000 for refrigerating plant, will not provide a plant that will meet the requirements. I should say, sir, that these estimates are based upon a well-studied and digested plan, and the construction that was asked for in the Budget is in connection with the instructions of the War Department based upon that plan providing for troops.

Senator JONES. How much do you want for refrigerating plants?

General CARSON. We want to construct a plant that the estimates indicate will cost ultimately \$231,000.

Senator JONES. \$231,000?

General CARSON. \$231,500, to be accurate.

Senator SPENCER. Can that all be built within the year, or will it take longer?

General CARSON. We can build that within the fiscal year; yes, sir. It appeared somewhat large to the members of the House Subcommittee on Appropriations, and they were unable apparently to appreciate the fact that in this plant we desire to provide machinery for the manufacture of ice for the garrison at war strength and cold storage only for the garrison at peace strength.

As you will understand, machinery of an ice-making plant is something that can not be improvised in a moment or gotten in a hurry, and in order to be prepared it was thought wise to build the ice plant for the increased garrison that would occur in time of trouble, and only enough of the refrigeration for the peace-time garrison. Ice is practically a necessity in that climate. That accounts for the size of the estimate.

Senator SUTHERLAND. At present you buy ice and ship it out in box cars there?

General CARSON. Yes, sir.

Senator SUTHERLAND. And you have to lease cold-storage facilities also?

General CARSON. Yes, sir; and we have nothing of the kind at Schofield Barracks.

Senator JONES. This \$150,000 would provide you an adequate plant for peace conditions; is that correct?

General CARSON. Yes; to build enough for the peace garrison in the way of ice making and refrigeration. I have not gone into that in detail and calculated what we can do, but I suppose we can. We can build a plant with it, but as to whether its capacity would be great enough I can not say at this moment.

Senator JONES. I judge from what you said it will take \$231,000 to build a plant that will take care of war and peace conditions?

General CARSON. Yes, sir.

Senator JONES. I just assume probably the House put \$150,000 in to take care of peace conditions.

General CARSON. Probably.

Senator JONES. And I wanted to know if that would not do it.

General CARSON. Probably it would. That figure did not come up in discussion, so what they based it on I am unable to say.

Senator JONES. What would be the life of such a plant?

General CARSON. Well, we propose to build a permanent plant, and its life would be indefinite, just like any permanent ice-making and cold-storage plant would be—a permanent structure.

Senator JONES. If you put one up capable of taking care of peace conditions, could it be enlarged in a reasonable time?

General CARSON. The only way in which we could make provision for increase would be to erect a building large enough for the additional apparatus necessary.

Senator JONES. If war conditions confronted us you could not enlarge the existing facilities?

General CARSON. Not very well, sir, out there. In fact, it would be almost impossible on account of its remoteness and difficulty of getting material. All this material would have to be produced in the United States, for instance, and shipped there.

Senator JONES. Well, it would not take very long to ship it to Hawaii.

General CARSON. No, sir; but judging by our experience in the past, it would take some time to get it. I would not like to undertake to furnish it, if the demand came, under from six to nine months and get it there.

Senator HARRIS. That is about the most important post in the Army in some respects?

General CARSON. We regard it as very important; yes.

Senator SUTHERLAND. I see your ice is costing you \$36,000 a year, according to the statement before the House committee.

General CARSON. Yes, sir.

Senator HARRIS. What would it cost to manufacture if you had this plant?

General CARSON. Well, purchased ice costs 40 cents a hundredweight. The estimate for the cost of manufacturing ice with our own plant is 18 cents a hundredweight.

Senator HARRIS. Forty cents as against 18 cents?

General CARSON. Yes.

Senator HARRIS. It costs \$36,000 to purchase it and it would cost between \$16,000 and \$17,000 to manufacture it, which would be a saving of about \$18,000. Would this \$150,000 plant save that amount of money?

General CARSON. Yes, sir; it would, because we would be furnishing ice for the post garrison, and the average consumption annually has been forty-five hundred tons. Assuming that that would continue and there would be no reduction in the garrison, we would save 22 cents.

Senator HARRIS. There is a likelihood of increasing it, is there not?

General CARSON. The garrison?

Senator HARRIS. Yes.

General CARSON. It is designed to do so, I know that; yes, sir.

Senator JONES. When you say it will save \$18,000, do you take into account the interest on the money invested, and depreciation on building and machinery, insurance, and all those things, or is that just the actual difference in the money expended and the money paid?

General CARSON. That is the actual difference.

Senator SPENCER. What is the next item, General?

Senator HITCHCOCK. I do not quite understand whether the General accepts this \$150,000 as sufficient or not.

Senator SPENCER. He wants the \$1,059,490 as set out on page 40.

General CARSON. We have asked that amount to complete the plant in accordance with the plans that have been adopted.

Senator JONES. He wants an ice plant created of sufficient size to take care of war needs, and then a refrigeration plant to take care of peace conditions.

Senator HITCHCOCK. Has there any estimate been made, General, as to how large an ice plant would be necessary and how large an appropriation would be necessary to provide one for peace needs?

General CARSON. No, sir; I have not done that. We were called on for a plant to provide ice for the war garrison and refrigeration for peace garrison.

Senator HITCHCOCK. \$250,000 is a war provision?

General CARSON. Partly, for ice, but not for the refrigeration. One building contains the two activities, you might say, one to manufacture the ice and the other to store the perishable supplies.

Senator HITCHCOCK. What I am trying to get at is whether this \$150,000, provided by the House, is sufficient for peace purposes.

General CARSON. I could not say sir, because that amount was fixed by the committee after we left them. Someone in the committee fixed that amount, and I have not found what it is based on.

Senator JONES. You said awhile ago you thought it would.

General CARSON. I think it will, but I have not gone into detail. I feel that we would be justified with this amount, if we find it can be done, to build a building large enough to house apparatus for ice, even if we did not put it all in, because the delay in time of emergency would be in constructing the building.

In that connection, as I started to give you the total figures in the budget, if they are allowed, this phraseology should go in: "For the construction and enlargement at military posts in the Hawaiian Islands of such buildings as in the judgment of the Secretary of War may be necessary, including appurtenances thereto, \$1,059,490: *Provided*, That \$200,000 may be expended for the partial construction of the KuTree Reservoir, and that \$200,000 may be expended for the partial construction of a refrigeration plant at Schofield Barracks."

MILITARY POST, PANAMA CANAL.

Then, further on, under the same heading, or immediately after that, we would like restored to the bill the proposed construction at the Panama Canal, which, in a way, is in a similar category, as one of our frontier defenses.

Senator JONES. Was there an estimate for that?

General CARSON. Yes, sir; it came in from the Budget.

Senator SPENCER. What page is that on?

General CARSON. Page 635 of the House hearings.

Senator SPENCER. It is not in this bill at all?

General CARSON. No, sir; the House committee eliminated it.

Major BROWNE. There is a note of it in the margin of your bill, on page 40—no, sir; they seem to have omitted it. It was in the estimate, though.

General CARSON. It was discussed before the House committee at page 635. It is in the estimates as submitted by the Director of Budget. The estimate as submitted through the Budget amounted to \$2,596,400, which amount was entirely eliminated by the House Appropriations Committee. The War Department, however, feels that it is very necessary to include a part of this, at least that portion covering the construction of the secondary storage plant for which we have estimates amounting to \$1,028,800.

I would like to submit this for consideration by the committee, and that the following phraseology be inserted, if such meets with its approval:

For continuing the construction of barracks, quarters, storehouses, and other buildings necessary for accommodating the mobile Army troops to be stationed in the vicinity of the Panama Canal, including all appurtenances thereto \$1,028,800: *Provided*, That not to exceed \$766,898 may be expended for the partial construction of a quartermaster warehouse and that not to exceed \$53,000 may be expended for the construction of one barrack building.

Senator HITCHCOCK. What do you call secondary storage?

General CARSON. We have what we call a primary and secondary storage project. The primary storage project—it is more of a technical term—is located at the south end of the canal, in the neighborhood of Panama City proper—Corozal, to be more accurate. That will take care of the forces on the Pacific side, which is really that side of the divide.

SECONDARY STORAGE PROJECT.

The secondary storage project, so called, is located to serve the Atlantic side and is near the Gatun locks. That is why it is called Gatun. We have some temporary facilities on the Pacific side that will take care of us for a while yet, but we have absolutely nothing on the Atlantic side. Most of the supplies are shipped from the Atlantic seacoast and delivered at Colon. As it is now, they are discharged over one of the piers belonging to the canal, and shipped by rail, as much as possible, to the posts where the supplies may be required, but a lot of them must be shipped necessarily to the temporary storage at Corozal on the south side, because there is no other place for them; then some have got to be brought back to the Atlantic side.

Senator HITCHCOCK. I asked the question because you spoke as though this appropriation was chiefly for secondary storage, yet when you specify the language it seems to be for barracks.

General CARSON. It provides for barracks for the men who have to be there. I will give you the items if you wish it.

Senator HITCHCOCK. I do not care for detail. This million you ask for is largely for barracks?

General CARSON. No, sir.

Senator HITCHCOCK. Largely for storage?

General CARSON. Largely for storage.

Senator SPENCER. \$53,000 for barracks.

General CARSON. Just for 135 men who will be necessary for the operation of this plant. That appropriation includes necessary roads, sewers—both sanitary and storm—clearing, grading, ditching, railroad spur, and electrical work.

Senator SPENCER. What is the next item?

BARRACKS AND QUARTERS.

General CARSON. Barracks and quarters. It starts on page 40. That was an item discussed at some length, beginning on page 639 of the House hearings. The main criticism of that, Mr. Chairman, is that it is not enough.

Senator SPENCER. That is, the appropriation on page 41?

General CARSON. Yes, sir; it is \$2,982,638. The Budget estimate was—

Senator HITCHCOCK (interposing). \$3,979,016.

General CARSON. Now, we would urge that be put to \$4,479,016.

Senator SPENCER. Have you a Budget estimate for that?

General CARSON. That comes into the very subject that was discussed a bit ago with Senator Jones about the reallocation of funds, but the total is not increased.

Senator SPENCER. You would like to have \$4,000,000?

General CARSON. Yes, sir; we earnestly request the \$4,479,016 and also the insertion of—

Senator JONES (interposing). Do you expect a supplemental estimate down on that?

General CARSON. Yes, sir; I think that will be included in the supplemental estimate. I have to consult with the Finance Department about that, because I did not handle that particular detail.

Major BROWNE. Yes, sir; we expect it.

General CARSON. We would like to have inserted also after the word "recruits," on page 41, line 5, these words, "for such furniture for the public rooms for officers' messes and for officers' quarters at military posts as may be approved by the Secretary of War."

That original draft was eliminated by the House Committee. It absolutely prevents us from providing furniture for the public rooms, for officers' messes, and for officers' quarters at military posts which we have been providing for the past 20 years, I should say.

Senator SPENCER. How much would be needed for that?

General CARSON. I have an item here of \$100,000 that we intended to set aside—furniture for public rooms, for officers' messes, and officers' quarters at military posts, wall lockers in permanent barracks, and refrigerators in barracks and quarters, purchase, maintenance, and repair of, \$100,000.

Most of that, I believe from the reports that come to us, would be required for maintenance and repair; if, toward the end of the fiscal year, additional furniture should be found necessary, we would purchase such as the available balance would permit.

Senator SPENCER. This takes care of all the barracks and all the quarters except the Coast Artillery in the United States, does it not?

General CARSON. Maintenance and repair, yes, sir; no construction except where specifically mentioned, but maintenance and repairs of all stations in the United States.

Senator SPENCER. Except Coast Artillery?

General CARSON. No; it includes Coast Artillery.

Senator SPENCER. Does it?

General CARSON. Yes, sir; for maintenance and repair.

Senator HARRIS. If we reduce the Army, would you need that?

General CARSON. I think so, sir. In fact, I believe so, because we deal with stations and not with numbers.

Senator HARRIS. If we reduce the stations?

General CARSON. If you reduce the stations, then it would reduce the cost, but we can not speculate on that. We must estimate on what exists. If we decided to reduce the Army and cut out stations, before we could get them in a state where we could say they would cost nothing whatever, a year would elapse.

Senator SPENCER. It is the administration expense of the coast defense that is not included?

General CARSON. Yes, sir; we maintain the barracks and quarters, etc.

Senator HITCHCOCK. You say this item of approximately four million is only for maintenance and repairs. It must contain some construction items. What would this mean, "For construction of reclamation plants"?

General CARSON. I can best answer that by giving you my items here. There is one item, "Barracks and quarters, stables, storehouses, magazines, administration and office buildings, sheds, shops, reclamation plants." That was inserted during the war—salvage plants.

Senator SPENCER. Then, for construction of reclamation plant on lines 15 and 16 can be taken out?

General CARSON. There is no construction involved there. This is for maintenance and repair.

Senator SPENCER. Then that word should be out.

General CARSON. It has been that way for the past three or four years, sir.

Senator SPENCER. But it is not needed now.

General CARSON. I can not predict what I will be called upon to do.

Senator HITCHCOCK. As far as barracks and quarters, stables, storehouses, magazines, etc., that is only for maintenance, is it?

General CARSON. Yes, sir.

Senator HITCHCOCK. It seems to me it ought to say so. That is a very loose way for appropriating for barracks, stables, quarters, and storehouses.

General CARSON. That is the language that has been in the bill for a number of years, sir.

Senator HITCHCOCK. If it is for maintenance it seems to me it ought to say so.

Senator SPENCER. It is your idea it would be carried out if in line 11 it said for maintenance and repairs for barracks, quarters, stables, storehouses, magazines, etc.?

General CARSON. That would prevent any small constructions that we are sometimes called upon to do. The Secretary of War under the present statutory law can authorize the construction of accommodations, providing no single building costs more than \$20,000.

Senator JONES. That is an administration limit, is it?

General CARSON. No; that is a statutory limit; not over \$20,000, except by special authorization of Congress—any construction of buildings or new buildings that exceeds \$20,000.

Senator JONES. So he can construct as many buildings as he wanted if they did not exceed \$20,000 each?

General CARSON. Yes, sir.

General ROGERS. I think it would be a mistake to change the language which enables the Secretary of War, in case some building burns down, to construct it. I do not think any advantage is taken of it.

Senator HITCHCOCK. That would be a subject of repair, would it not?

General ROGERS. Sometimes the building burns down entirely.

Senator HITCHCOCK. There is no limit to which you can repair. The Union Pacific Railroad used to make a locomotive by taking a bell and repairing it.

General CARSON. We do not only have to satisfy you gentlemen but we have to satisfy the Comptroller General, who tells us what we can do with it.

Senator HITCHCOCK. I must say I could not tell whether that was for maintenance or what it might be. It might be for construction.

Senator JONES. What does this language in line 16, "for constructing and repairing public buildings at military posts" mean?

General CARSON. In other words, under this appropriation we can construct and repair public buildings at military posts, provided no one building costs more than \$20,000.

Senator JONES. You have the word "construction" in there.

General CARSON. Yes, sir; that is for that purpose; to enable the Secretary of War, if he finds it necessary to authorize that construction, either an addition to a building or replacing a destroyed building, provided the statutory limitation is not exceeded.

Senator SUTHERLAND. That would not give him authority to do any amount of construction work in excess of \$20,000?

General CARSON. No, sir; not on any one building.

Senator HITCHCOCK. Do you know what statute that is or when it was passed?

General CARSON. It has been in the Revised Statutes for 25 or 30 years to my own knowledge; just exactly the year it was passed I do not recall, sir.

Senator JONES. What I was really wondering is why you need that amount. Does this language in line 11 cover all public buildings at military posts "barracks, quarters, stables, storehouses, magazines, administration and office buildings, sheds, shops, and other buildings necessary for the shelter of troops, public animals, and stores, and for administration purposes"?

General CARSON. The phraseology of that item, Senator Jones, I think is a growth from time to time, due to decisions made by the auditing officers of the Treasury to the effect that so-and-so does not come under the law, and we have to get specific authorization for it, and that is why some of this language has been in these bills in this shape for years and has really grown.

I suppose to analyze it now would seem rather vague and indefinite, but in this item "Barracks and quarters" we have to pay the salaries

and wages of civilian employees that are used in connection with maintenance and repair, and rental of quarters, barracks, and buildings for occupation of troops: for use of stables, storehouses, offices, and for all other military purposes; rental of grounds for cantonments, camp sites, and other military purposes; hire of recruiting stations and lodgings for recruits; furniture for public rooms of officers' messes, and officers' quarters at military posts; wall lockers in permanent barracks, and refrigerators in barracks and quarters; temporary structures, screening, etc., for R. O. T. C. camps.

Senator HITCHCOCK. This includes the employment of civilian employees also?

General CARSON. Yes, sir.

Senator HITCHCOCK. Does that mean that the appropriations for civilian employees specifically provided for are not all, but that there are a lot of others under such blind clauses as this?

General CARSON. Yes, sir; for instance, if we employ carpenters or painters or plasterers or any trade we use in connection with the maintenance and repair or construction of a building, the restriction placed upon us by the auditing officers of the Treasury compel us to pay them from this particular barracks and quarters appropriation. If we want to hire a plumber in connection with our plumbing work, they require us to pay him out of water and sewers; if we want a steam fitter or electrician in connection with the lighting, we have to pay that out of regular supply. It is a restriction placed upon us that requires us to do this.

Senator HITCHCOCK. Does it include civilian employees employed by the year?

General CARSON. There are more or less permanent employees paid by the day or by the year, depending upon their status. For instance, we have repair work to be done at these posts, annual repairs that we start after the 1st of July, when this money becomes available, and we will have to finish it before the weather becomes unseasonable. We employ these men to do this; they are on the job. They may be employed by the day or the month. Then we have a certain number permanently employed at the post in the way of carpenter foremen and plumber foremen and painter foremen, who are paid by the year, but their number is very restricted.

Senator HITCHCOCK. You have had during the current year \$6,860,000?

General CARSON. Yes, sir.

Senator HITCHCOCK. You have an estimate of \$3,979,000, and the House gave you \$2,982,000?

General CARSON. Yes, sir; and we ask the Senate Committee to increase it to \$4,479,016, which is explained by the reallocation of the items under the lump amount that is to come in later.

Senator HITCHCOCK. Can you tell us what the pre-war appropriation for these items was?

COMPARATIVE STATEMENT SHOWING APPROPRIATIONS FOR PRIOR YEARS.

General CARSON. Prior to 1917?

Senator HITCHCOCK. Yes.

General CARSON. For the fiscal year 1913, on a basis of 92,000 officers and men, it was \$1,700,000; that is, barracks and quarters alone. For

the fiscal year 1914, on the basis of 97,760 officers and men, it was \$2,093,480; for the fiscal year 1915, on the basis of 105,193 officers and men, it was \$2,123,997; for the fiscal year 1916, on the basis of 107,641 officers and men, it was \$2,133,858.

Senator HITCHCOCK. What is the number of men in that last item?

General CARSON. One hundred and seven thousand six hundred and forty-one; the number of stations were less than they are to-day.

Senator HITCHCOCK. How many have you to-day?

General CARSON. We have 296, I think. The exact number is somewhere in my notes here, or testimony; it is between 296 and 300.

Senator HITCHCOCK. What was it at that time, say, prior to the war?

General CARSON. Before 1917?

Senator HITCHCOCK. Yes, sir.

General CARSON. About 225.

Senator LENROOT. We are not estimating for any new buildings at all under this. This is entirely for maintenance and repair.

Senator HITCHCOCK. This provides for construction.

General CARSON. In principle, not because it is necessary.

Senator SUTHERLAND. Only to cover, as I gather from his statement, only to cover such things as might possibly be made necessary by a building being burned which should be rebuilt.

General CARSON. Unless we have that in there the building could be destroyed by fire and the Secretary of War would not be authorized to replace it because of the restriction referred to. This is based entirely on maintenance and repair and a small percentage to take care of any emergencies.

Senator SUTHERLAND. Your vouchers would not be allowed.

General CARSON. How is that?

Senator SUTHERLAND. Your vouchers would not be allowed.

Senator HITCHCOCK. In view of the statement of the Secretary of War that a reduction of the Army would involve vacating a number of posts; do you not think, General, this House appropriation could suffice to take care of those remaining?

General CARSON. No, sir; because evacuation of the posts may be ordered, say, to take place the 1st of July or the 1st of August, but before we could get rid of the property or the cost of caring for it a whole fiscal year might expire.

Senator HITCHCOCK. These pre-war figures you have given are at the maximum only about \$2,000,000?

General CARSON. Yes, sir; \$2,000,000; one of them is below that; \$2,133,000, I think, is the largest—yes; \$2,134,000.

Senator HITCHCOCK. And could you use this \$630,000 during the current year?

General CARSON. Yes, sir; we have not actually expended it yet, but we have already expended or obligated to March 11, \$3,400,000.

Senator SPENCER. What is your next item, General?

General CARSON. Barracks and quarters, Philippine Islands, on page 41 of the bill.

BARRACKS AND QUARTERS, PHILIPPINE ISLANDS.

General CARSON. That appropriation for some time has been \$300,000. The explanation appears at page 661 of the House hearings. The House committee reduced it to \$200,000.

Now, of the \$300,000 heretofore appropriated about \$70,000 is required to take care of rentals and leases for buildings occupied by troops in China, and the bulk of it at Tientsin, China; so if that obligation continues next year, and so far as I am informed it will, it will leave us only \$130,000 for the maintenance and repair of the property in the Philippine Islands at the various garrisons, and it would be utterly inadequate.

Senator HITCHCOCK. General, does not the new treaty provide for the return of those troops from China?

General CARSON. I can not say, sir.

Senator SPENCER. There are only two battalions there now?

General CARSON. Headquarters and two battalions of the Fifteenth Infantry, I think, and some auxiliary troops.

Senator HITCHCOCK. Assuming that the treaty does provide for the return of the troops, and it certainly should provide for the return of some of them, we could get along without that \$70,000; it would not be required then?

General CARSON. Assuming that the \$70,000 would not be required, and the troops were removed from there promptly by the 1st of July, we would still be \$30,000 shy. The condition of the buildings occupied by the troops at some of the stations, particularly at Fort McKinley, is reported as very bad. Those buildings are mostly frame, built twenty-odd years ago, and they have about lived their life.

Senator JONES. What do you think about this limit the House committee has placed on houses for officers; have you any objection? It appears at page 42; you have the estimates there on the individual buildings; I wonder if that would not make up more than the difference of this \$30,000?

General CARSON. Well, it is a limitation that has existed for some time.

Senator SPENCER. You mean as the House has it?

Senator JONES. As the House has it.

General CARSON. In the Philippine Islands.

Senator SPENCER. What?

General CARSON. In the Philippine Islands those restrictions have existed for some time.

Senator SPENCER. Then why did you want the limit increased from \$8,000 to \$16,000 for general officers?

General CARSON. Because of the cost of construction at the present time we can not build such houses as the department wants.

Senator JONES. You can build a pretty good house for \$8,000.

General CARSON. For a general officer?

Senator JONES. Yes.

General CARSON. For \$8,000?

Senator JONES. Yes.

General CARSON. I had three years' experience in charge of construction on the island of Corregidor, and for general officers \$8,000 would not do it, even though that was seven years ago.

Senator JONES. What did you do?

General CARSON. Did not build any.

Senator HARRIS. You do not expect to build any there now!

General CARSON. No; there will be none to build. We keep within this restriction for junior officers by doubling them up and building two-story apartments, as it were.

Senator SPENCER. That is, for \$12,000 you build a house that will take care of two families?

General CARSON. Two families; yes, sir; that is, \$8,000 for an officer below a captain.

Senator SPENCER. For a captain or below?

General CARSON. And even then we had considerable difficulty.

Senator HITCHCOCK. What materials would you use in such cases?

General CARSON. In order to keep within those restrictions I had to use wood. We had to design a special building at Corregidor Island in order to keep within this limit; we would construct a concrete platform on which we erected a framework of Oregon pine—which was cheaper than the local lumber—to the exterior of this framework was attached metal laths, which was covered with about two inches of cement plaster. The studding was exposed on the inside, and inside plastering was omitted except on one side of partitions. The roof was covered with wood sheathing and asbestos shingles, which were brought from the United States.

Senator HITCHCOCK. Two-story buildings?

General CARSON. Yes, sir.

Senator HITCHCOCK. That was for officers of what grades?

General CARSON. Captains and lieutenants.

Senator HITCHCOCK. Was it a comfortable building?

General CARSON. Yes, sir; fairly comfortable; the rooms are somewhat restricted; each family had three bedrooms, one bath, a combination dining and living room, kitchen, small room for servants, and a covered porch.

Senator HITCHCOCK. How many men have we in the Philippines now?

General CARSON. The exact number I have not at my fingers' ends, but I think it is ten or twelve thousand.

Senator HITCHCOCK. That includes those in China?

General CARSON. I think it does, sir.

Senator JONES. If this language goes as the House has it, you will not have any provision for the men in China, will you?

General CARSON. You are referring to the—

RENTALS FOR THE UNITED STATES TROOPS IN CHINA.

Senator JONES. They have left out the words "and rentals" for the United States troops in China.

General CARSON. Yes, sir.

Senator JONES. So that there will be no provision for anything of that kind?

General CARSON. No; there will not.

Senator JONES. As I understood you, that would save \$70,000.

General CARSON. That is, we have been spending \$70,000.

Senator JONES. So this \$200,000 would only be short of the \$300,000 estimate anyhow \$30,000?

General CARSON. Yes, sir; rentals for buildings now occupied by the troops at Tsientsin.

Senator HITCHCOCK. There would be some reduction in the troops there if there is any reduction in the Army, would there not?

General CARSON. That I can not say, sir.

Senator HITCHCOCK. Is it anything but natural that there would be a reduction in the number of troops in the Philippines now that we have put them under the protection of Japan and Great Britain?

General CARSON. That is a matter of military policy I can not discuss. Of course, if the troops are taken away from Tsientsin, unless it is done so they can vacate at the end of June we will still be under obligation after the 1st of July for the part of the time they remain after that. Of course, I can not say what that may be; I can not advise as to that.

Senator SPENCER. There is some question about the return of those troops from China; I think the troops are going to return, but I can not tell when they will be returned; if that is done, of course, a proportionate amount of rental will be released.

Senator JONES. General, you do not ask, I observe, or do you, that these words be restored?

General CARSON. Yes, sir; I do.

Senator JONES. You are urging that?

General CARSON. Urging that so as to be fortified in case of any unforeseen delay in getting out of China; and if for that reason we should be under any obligation after the 1st of July we will be in position to preserve the international relations and have them respected.

Senator JONES. I understand, then, you want that restored?

General CARSON. Yes; I want that restored—"and rentals for the United States troops in China"—restore it to where it has been in the past.

Senator SPENCER. What is the next item?

ROADS, WHARVES, WALKS, AND DRAINAGE.

General CARSON. Under this item the Budget estimate was \$850,000, and as reported by the House committee and passed by the House it was reduced to \$500,000. The explanation of that item is found at page 665 of the House hearings. That is for the construction and repair by the Quartermaster Corps of roads, walks, and wharves; in other words, as described in the phraseology of the item. "*Provided*, That none of it shall be used for permanent construction of any roads, walks, or wharves connected with any of the National Army cantonments or National Guard camps." We would like to have it restored to the original, because the roads in many of our posts and camps are in extremely poor condition.

Senator SPENCER. General, does not the reallocation of funds reduce that \$850,000 to \$400,000?

Major BROWNE. \$500,000 is carried in the bill.

Senator SPENCER. So with the reallocation we could not increase that without another estimate?

General CARSON. Well, we will have to do the best we can with the \$500,000.

Senator SPENCER. Did you have anything to say about that proviso at the end, General?

General CARSON. No, sir.

Senator SPENCER. What is the next item?

SHOOTING GALLERIES AND RANGES.

General CARSON. There is nothing on that.
Senator SPENCER. What is the next item?

RENT OF BUILDINGS, QUARTERMASTER CORPS.

General CARSON. Nothing on that, sir.

CONSTRUCTION AND REPAIR OF HOSPITALS.

General CARSON. This is at the bottom of page 43. In that item the House inserted the words:

Provided, That no part of this appropriation shall be used for the construction of new hospitals.

If that is left in it is going to place us in a very embarrassing position, because nobody knows just what "construction of new hospitals" means. Does that prevent us from adding a ward to an existing hospital; or does it mean no new hospital project shall be started? If it is intended to prevent the construction of new hospital projects, I feel that it should be more specific and say so; if it is meant to prevent the construction even of an addition to existing hospital buildings, it still ought to be more specific.

Senator SPENCER. You have no objections to the prohibition to the construction of new hospital projects?

General CARSON. No, sir; the appropriation is too small, anyhow, to do any more than maintain or repair existing hospitals.

Senator JONES. Then, it does not do any harm?

General CARSON. Sir?

Senator JONES. Then, it does not do any harm?

General CARSON. Yes, sir; it does, because there is a vagueness of the phraseology that will get us into difficulties with the auditing officers of the Treasury; that can be interpreted to mean that we can not even build a small addition to existing hospitals or that we can not start any new hospital project.

Senator JONES. Well, you have provision here for the alteration of permanent buildings at posts; but that would not cover it.

Senator SPENCER. No.

General CARSON. It is a question of the phraseology.

Senator JONES. The clerk has just called my attention to it in lines 2 and 3 on page 44: "For the construction and repair of general hospitals and expenses incident thereto, and for additions needed to meet the requirements." Now, that says "additions to hospitals," so, it seems to me—it is plain in my mind—what they meant.

General CARSON. We think that they do mean that. From the discussion, our feeling is they meant to prohibit the construction of any new hospital project as a whole, and, if that is meant, if it could be phrased so as to indicate that without any doubt, it would be better.

Senator JONES. You think if we put the word "projects" on there—"new hospital project"—you think it would be all right?

General CARSON. I think it would cover it. I think that the legal advisers would have to interpret that the way it was meant.

Senator SPENCER. I do not think that would interfere.

General CARSON. No, sir; "new hospital projects" would probably meet the situation.

Senator SPENCER. What is the next item, General?

QUARTERS FOR HOSPITAL STEWARDS.

General CARSON. The next item is "Quarters for hospital stewards." In our original estimate we asked——

Senator SPENCER. You asked for construction.

General CARSON. Yes, sir; for construction and repair of quarters for hospital nurses. We asked the Budget for \$10,000 and the House cut the amount to \$5,000, which is very small for the number of buildings involved.

Senator SPENCER. How many are there?

General CARSON. There are a number at every post where we have a hospital; I can not tell you exactly, but it is somewhere in the neighborhood of 150.

Senator HARRIS. We have already gone into that matter, Mr. Chairman; we considered that matter once before.

Senator SPENCER. Yes; somebody talked to us on that.

General CARSON. Possibly the Surgeon General brought it up.

Senator SPENCER. Yes; and by a strange coincidence he, too, seemed to think that the amount was insufficient.

General CARSON. But whether or not he spoke for this appropriation for construction and repair, we would like to have that remain in, because we can not construct anything with \$10,000 and keep the others in repair.

Senator HARRIS. He did not discuss that.

General CARSON. But at some future time it might be necessary to ask, in the same appropriation, for an additional amount to construct new buildings, and it might be granted, and if kept in the form of "construction and repair" or "construction, maintenance, and repair," we can not spend any money for new buildings, but it leaves it in shape so that in future it could be increased if Congress thought best. Insert the words "construction, maintenance, and repair."

Senator HITCHCOCK. What is the present phraseology?

General CARSON. "Construction and repair" is the phraseology of the——

Senator SPENCER. "Construction and repair?"

General CARSON. It has been for years "Construction and repair," but certain members of the House committee took exception to the word "construction" because they feared it would enable the War Department to spend all the money in one building; but it is not enough; it is not possible.

Senator SPENCER. What is your next item, General?

General CARSON. I think that is all of the construction items.

Senator SPENCER. Does that conclude the hearing to-day?

General CARSON. Yes.

Senator SPENCER. Then, to-morrow afternoon at 2.30 we will convene again.

Major BROWNE. Mr. Chairman, will you hear Major Daly just a moment?

Senator SPENCER. Yes.

Major DALY. In the appropriation act for the support of the Army for the fiscal year 1921, and preceding years, there was carried a clause, following the appropriation "Water and sewers," as follows:

Provided, That all the money heretofore appropriated under the titles "Subsistence of the Army. Regular; supplies; incidental expenses; Army transportation; clothing and equipage; and water and sewers at military posts." shall be disbursed and accounted for as general appropriations. Quartermaster Corps, and for that purpose shall constitute one fund.

The War Department is desirous that that clause or proviso be restored. It was omitted from the appropriation for the fiscal year 1922 for the reason that expenditures for certain purposes under each of the appropriations named were limited to fixed amounts.

Senator SPENCER. Very well; we can see the force of it.

Senator HITCHCOCK. The purpose of that is to give you a lump fund instead of having it specified; it practically amounts to that, that he can consider that as one fund and, I presume, use the amounts interchangeably?

Major DALY. Yes, sir. The main purpose of the provision, though, sir, was to enable the Secretary of War to meet all contingencies without incurring deficiencies; it prevents deficiency appropriations.

Senator HITCHCOCK. However, that question has been up before, and Congress has made every effort to get the items handled specifically and avoid lump sums wherever possible.

Major DALY. But the law authorizes him to incur deficiencies in subsistence and transportation, quarters, heat, light; and in the past we have incurred deficiencies under those items and have come up to Congress for those items—that was before we got that provision of law that made the funds in the appropriations named available to take care of a shortage in another appropriation and avoid a deficiency estimate.

Senator SUTHERLAND. The Secretary being particularly desirous to avoid—

General CARSON. Deficiencies.

Senator SPENCER. The committee will adjourn until to-morrow at 2.15 o'clock p. m.

(Thereupon, at 4.30 o'clock p. m., the committee adjourned until 2.15 o'clock p. m., Friday, April 14, 1922.)

WAR DEPARTMENT APPROPRIATION BILL, 1923.

FRIDAY, APRIL 14, 1923.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met, pursuant to adjournment, at 2.15 o'clock p. m., Senator James W. Wadsworth presiding.

Present: Senators Wadsworth (chairman), Lenroot, Spencer, Hitchcock, and Harris.

THE ADJUTANT GENERAL'S OFFICE.

STATEMENT OF SENATOR ALBERT B. CUMMINS, OF IOWA.

FURNISHING TO ADJUTANT GENERALS OF STATES STATEMENTS OF SERVICE DURING THE
WAR WITH GERMANY.

Senator WADSWORTH. As I understand, Senator, the amendment which you propose comes on page 14 of the committee print of the bill?

Senator CUMMINS. Yes; it is to strike out lines 7 to 13 on page 14, inclusive, and insert the language proposed in the amendment.

This amendment, gentlemen, is the substance of a bill which I introduced, which was referred to the Committee on Military Affairs and reported favorably, but with an amendment, and the amendment strikes out the part of it in which I am particularly interested. I will read it, so that you may see just what it is. This is H. R. 10871, and it reads as follows:

[H. R. 10871, Sixty-seventh Congress, second session.]

Amendment intended to be proposed by Mr. Cummins to the bill (H. R. 10871) making appropriations for the military and nonmilitary activities of the War Department for the fiscal year ending June 30, 1923, and for other purposes.

On page 14, strike out lines 7 to 13, inclusive, and insert the following:

"For the preparation, for historical purposes, of the following documents and information concerning officers and soldiers from the several States and the District of Columbia who were in the military service of the United States during the World War; and which The Adjutant General of the Army is hereby directed to furnish to the adjutant generals of the several States and the District of Columbia, \$350,000, to be immediately available:

"(1) As to individuals—

"(a) True and correct copies of the individual record cards of all officers and all enlisted or selected men, excepting such as have heretofore been so furnished; and

"(b) A statement to each officer or enlisted or selected man who died in the service, showing place and date of death of such officer or man and the cause of death, whether by wounds, accident, or disease; and such statement shall be furnished in each case, irrespective of whether the individual record card

of such officer or man has heretofore or is to be hereafter furnished: *Provided*, That in all such cases, if death occurred in a hospital, the name or number and location of such hospital shall appear; and if the death occurred in action or in the field, the official designation of such action, if any, together with the local designation of the place where the same occurred shall appear.

(2) As to units—

Now, it is this part of the bill, which follows, that was stricken out by the Committee on Military Affairs in its report [continuing reading]:

"(a) A tabulated statement showing the title of the organization, the race of the unit, white or Negro; the date it was authorized; its maximum strength; where and when mobilized or organized, and when it left the United States, if at all, for service overseas; its stations, assignments, and service, both in the United States and overseas, with the dates thereof, and appropriate remark as to combat or other service of importance; when returned to the United States, when and where demobilized, transferred, or otherwise discontinued as a distinct organization; and

"(b) A tabulated statement showing the designation of each noncombat unit which formed a part of or was attached to any division or other tactical unit during the World War, and the dates of joining or relief therefrom, in such form as may be used as an addition to the histories of divisions and other tactical units heretofore furnished to the adjutants general of the several States and the District of Columbia: *Provided*, That, for the purposes of this and the preceding paragraph, the term 'overseas service' shall mean any service outside or beyond the continental limits of the United States, but in case the unit did not serve overseas its stations in the United States shall be given."

Mr. Chairman and gentlemen, I think it is logical first to take up the question of whether this is new legislation or not. I have no doubt whatever, with regard to the inquiry as to whether it is general legislation, that it is not, but there may be a difference of opinion as to whether it is new legislation.

The existing law upon that subject is found in the Statutes at Large, Sixty-sixth Congress, volume 41, beginning on page 109. That was an act appropriating \$3,500,000 for certain purposes. Some of those purposes are not material to the present inquiry, but that part which is pertinent reads in this way:

The Adjutant General of the Army in connection with the arrangement, operation, and maintenance of the files of those records: *Provided*, That such part of this appropriation as may be necessary shall be available for the employment of clerical help required to furnish the adjutants general of the several States statements of service of all persons from those States who entered the military service during the war with Germany: *Provided further*, That this appropriation shall be disbursed by such officer as may be designated by the Secretary of War for the purpose.

That appropriation has not yet, as I understand it, been exhausted. Part of it possibly has been returned. Under that act The Adjutant General proceeded to furnish the States a certain part of the information which the States want. Some of the States have thought that he has not been doing it with the promptitude and diligence that he ought to have used, but I make no criticism about that; but I believe that this act authorizes The Adjutant General to do all the things which are specified in the amendment which I proposed.

Senator LENROOT. In so far as that sum will permit him to do it?

Senator CUMMINS. In so far as that sum would permit him to do it; and an additional appropriation for those purposes would not be new legislation.

Senator LENROOT. It would if all authority ceased with the appropriations.

Senator CUMMINS. Of course I do not agree with the Senator from Wisconsin about that.

Senator LENROOT. I will put it in the form of a question, then.

Senator CUMMINS. I believe another appropriation for this purpose and for this purpose alone would not be reckoned as new legislation so far as these purposes are concerned. It would be new legislation so far as an appropriation is concerned.

Senator LENROOT. Yes.

Senator CUMMINS. I assume legislation of that character is not within your rule, because every appropriation is new. You could not make any appropriation if that were true.

Senator LENROOT. Let me ask a general question. Suppose we go back 10 years and find that here is a proviso to a bill providing that a certain portion of the appropriation might be used for certain purposes. Do you think an appropriation now could be valid under our rule and say 10 years ago a certain amount of money could be used for that purpose and now we could make another appropriation?

Senator CUMMINS. I think so, because your rule, if it excludes all new appropriations, would prevent you from doing anything at all. It would emasculate and destroy your entire jurisdiction.

Senator LENROOT. Yes.

Senator CUMMINS. So that I do not think you can construe that rule regarding new legislation to cover new appropriations.

Senator LENROOT. Yes; but must there not be something in existing law or in the previous provisions that in themselves authorized further appropriations?

Senator CUMMINS. The fact is that this appropriation has not been exhausted. I am informed that a very considerable part of it has not been exhausted for these purposes, and that possibly some of it has been returned to the general account. I do not know about that.

Senator SPENCER. Now, suppose you are right, even; suppose your contention in that regard is right; do you think where you have legislation that enables The Adjutant General to furnish certain material with regard to the service of the men, which the States need, that that would warrant an appropriation for the service of information with regard to the units, which the States do not need and are not asking for, except as to the matter of information or curiosity? There is not a bonus law in a single State that needs the unit information for the giving of it, is there?

Senator CUMMINS. I presume you do not look only at the bonus laws of the States. This is not a question of what the States absolutely need, but what is fair and just on the part of the States to publish in regard to the men.

Senator SPENCER. That is true, and I have a great deal of sympathy with the purpose. Is not that new legislation?

Senator CUMMINS. I will come to that.

Passing the first question, if the act to which I have referred would authorize The Adjutant General to furnish the information with regard to the units of organization, then, in my opinion, it is not new legislation. I suppose there must be some latitude in the con-

struction of the new rule; that is to say, legislation that may not be in phraseology precisely the same as existing legislation might nevertheless not be new legislation, if it embraces the same subject and simply clarifies or makes definite what is left indefinite and uncertain—uncertain in the sense of requirement—in the original act.

The provision against new legislation, as I understand it, is intended to provide a protection against entering upon new subjects, or entering into an appropriation law independent legislation which is new in its character—new in its character, not new in its phraseology—because you could reproduce any law that we have, in different phraseology, and embrace the same general authority or scope, without being subject to your rule against new legislation.

Now, let us see. I will come in a moment to the question of whether the Government ought to furnish this information or not. The statute says:

Provided, That such part of this appropriation as may be necessary shall be available for the employment of clerical help required to furnish to the adjutants general of the several States statements of service.

Now, before I comment upon that you may want to know what happened in the House on this same point. I frankly concede, too, that the House has held—the Presiding Officer of the House has held—substantially that legislation in regard to these units, giving a history of the units or organizations is new legislation. I am appealing from the judgment of the Speaker of the House to what I hope is the better judgment of the Members of this House. But when the question came up in the House with regard to furnishing to the States the place of death and of burial, where one was wounded, so as to make a complete personal history of the entry into the service and the final discharge from the service, by death or otherwise, it was held in the House—or at least Mr. Stafford withdrew his point of order—that that was not new legislation, although it is founded upon exactly the same statute that I have just read; and the appropriation which was reported by the Committee of the House was increased \$102,000; that is, it was increased from \$100,000 to \$202,000, for that very reason.

Now, I came for a moment to consider the point just raised. In my opinion, furnishing the history of the units of these organizations is much less vulnerable to a point of order than the furnishing of information in regard to the death, and its place, and the place of burial, and the like, because that information is not as closely related to the service of all persons from those States as is the history of the organizations.

I have been in communication with a great many adjutants general throughout the country, and I know precisely, of course, what they want. When they publish a roster of the officers and men in their States, or from other States, here is the name and here is the unit: here is the company or the regiment to which this soldier belonged; and then comes, of course, his death, if it occurred, or his discharge, if that occurred. Now, that gives to the people of the State no information whatever with regard to where that man served. The mere name and age and place of enlistment and place of discharge or place of death does not enable anybody in the State to follow that man and know where he was engaged.

Senator SPENCER. But your amendment does not touch the individual men of a unit?

Senator CUMMINS. Certainly not; but if John Smith was in a certain unit, then, turning to that unit you can at once tell where John Smith was, and when he was there; and that is the value of it. It is absolutely necessary, if the people of the State are to have anything more than the names of their soldiers.

Senator SPENCER. Does not the service record, in giving a man's name, tell in what unit he went when he was enlisted, and to what units he was transferred, and the date of that?

Senator CUMMINS. It gives where he was enlisted, and all—

Senator SPENCER. It gives the unit, "John Smith, enlisted—One hundred and thirty-eighth Infantry; transferred to the One hundred and twenty-seventh Artillery," or something of that sort.

Senator CUMMINS. But they have not any idea as to where those units operated, whether in the United States or outside, in France, or if in France in what part of France; or if in Siberia; or what was done there. They have not any more idea as to that than though the original information were not given.

Now, it is not a new thing. The Navy has furnished this entirely at its own expense. The Marine Corps has furnished their history. The Medical Corps has furnished its history. All that is lacking is the Army. It sounds a little appalling, of course, when you speak of a history of the war. It may not be finished for 20 years. But this is not a history of the war. This is a mere outline, a mere statement of each unit, where it was organized and where it operated; and Secretary Weeks in his letter to me, which was introduced in the House and which followed a very careful review of the subject that I had—Secretary Weeks, in company with the officer in charge of this matter in my State, said the following:

WAR DEPARTMENT.

Washington, D. C., December 24, 1921.

Hon. A. B. CUMMINS.

United States Senate.

MY DEAR SENATOR: Referring to your recent personal call at this department in company with Col. Frank E. Lyman, secretary-director, Iowa War Roster Commission, Des Moines, Iowa, who desires (a) statements of service of those officers and enlisted men for whom no statements have been previously prepared.

I might say at that point, without criticizing The Adjutant General's Department at all, that up to the time this was written The Adjutant General had not furnished to the State of Iowa the card of a single officer. All of his information had been of these men. But of course the officers would follow later on. But the work was not complete, at all. [Continuing reading:]

(b) The place of death of those who died while in the service during the World War in addition to the information on the statement of service cards; and (c) a tabulated statement showing a brief history of each unit that belonged to the Army during the World War; and in response to your request for an estimate of the probable cost of furnishing the information desired, I have the honor to inform you as follows:

(a) It is estimated that there are 132,000 officers and field clerks and 340,000 enlisted men who performed military service but for whom no statements of service have been prepared to date. Based on past experiences and the best data now available it is estimated that the cost of completing the statements of service in the 472,000 cases would be approximately \$225,000.

(b) Based on the results of actual tests made by searching 175 cases for place of death, it is estimated that the cost of furnishing the place of death in all cases would be approximately \$26,000. In this connection, I desire to invite your attention to the fact that had this part of the work been undertaken when the statements of service were prepared the cost would have been prohibitive, because the records from which the place of death could be secured were in many cases inaccessible, many of them not having reached the War Department at that time.

As I understand it the amount appropriated in this act will take care of those things up to the expenditure of \$202,000, although I am very much afraid that The Adjutant General would say that he need not be, at least, in any hurry about furnishing that additional information.

Senator HARRIS. Mr. Chairman, I want to just state this thing that I happen to know about, with reference to the delay in the report. The Adjutant General asked for this extra appropriation to complete this work more than a year ago, and he told me that unless it was completed it would cost twice as much to reorganize the bureau to complete it, just as it is now, as the present Adjutant General states, and I at that time begged the members of the committee to make the appropriation, because The Adjutant General told me how serious it was, and he knew of that criticism.

Senator CUMMINS. The Adjutant General did everything he could. I think.

Senator HARRIS. The records in The Adjutant General's office are in better condition now than they were in 30 years ago, after the Civil War. I just happened to be interested in that.

Senator CUMMINS. Then I come, in the letter of the Secretary, to my part of it. [Continuing reading:]

(c) It is estimated by the historical branch of the Army War College that the preparation of a tabulated statement showing a brief history of each unit that belonged to the Army, 8,500 in all, will cost between \$51,000 and \$100,000. It being impossible to determine at this time, with any degree of certainty, what the approximate cost would be. This estimate of cost does not include the cost of printing the organization histories after they shall have been compiled.

Sincerely yours,

JOHN W. WEEKS.
Secretary of War.

We did not ask anything of that kind. My State, and I think every other State, will be glad to do the printing, and the compilation, too, for that matter—whatever additional compilation is necessary. What we want, and what every State, I think, wants, is such a compilation or statement with regard to the organization and movements of the various units, so that, taken in connection with the card, with the information given in the card, one who is interested can trace a particular soldier from enlistment during the war. Now, I can not think that if this statute is applicable at all, a direction to The Adjutant General or the Secretary of War to include the preparation of this history of the units would be new legislation, simply because he is already required to furnish statements of service.

That means, of course, statements that will enable the people of the State to understand what service that soldier has rendered. I take it that the people of every State are proud of what their soldiers did

during the war, and that is a community pride; but the friends and the relatives and those who are specially interested in any given soldier want to know, and want the records of the State to show, what service that soldier rendered. If I were asked to compare the additional cards that are to be furnished under this law, that is with information as to death, burial, etc., and the history of the units so far as new legislation is concerned, I would say that it was very much less doubtful concerning the latter than the former.

The House bill contains exactly the law as it passed in the statute which I have just read. It says:

For expenses incident to completion of the work of furnishing to adjutant generals of States statements of service of all persons from those States who entered the military service during the war with Germany, including the employment of clerical and other help in the office of The Adjutant General of the Army, \$202,000, to be immediately available.

That amount was originally \$100,000, as reported in the committee, but from the estimate given by the Secretary of War the \$202,000 would not be sufficient to do all of this work. That is my view of it, gentlemen. I think that no greater mistake could be made—that ought not to influence your opinion with regard to the law of the matter, of course; but no greater mistake could be made—than to postpone the furnishing of this information as rapidly as it can be secured. I know something about the difficulties of it. When I was governor we undertook for the first time to publish a roster of the men of the Civil War from our State, and at every step we found increasing difficulty, because it had been postponed so long. I know that all the State authorities are deeply interested in securing this information. I will not take up this other matter in regard to the Mississippi River now, because you do not intend to consider that.

Senator WADSWORTH. None of those members of the committee who will consider it are here now.

Senator CUMMINS. With that, gentlemen, and my thanks for the time you have given me, and your consideration, I will leave it with you.

STATEMENT OF MAJ. GEN. JAMES G. HARBORD, DEPUTY CHIEF, GENERAL STAFF.

Senator WADSWORTH. Gentlemen, General Harbord is here to discuss certain phases of this bill, I assume, from a broad national viewpoint. We will be very glad to hear you, General, if you will proceed in your own way, calling our attention to items as you see fit and as they occur to you.

General HARBORD. I have been designated by the Chief of Staff to testify before your committee generally on the three components of the Army of the United States and the mission of each, treating in some detail the mission of the Regular Army, its size and exterior garrisons, and its purpose for a trained and efficient expeditionary force, for a model and teaching body, discussing somewhat its overhead, the necessity for and disposition of 13,000 officers and 150,000 men, exclusive of Philippine Scouts.

Also, the National Guard, the Organized Reserves, and some general comments on the House bill.

As the basis of what I have to say, I will submit three statements.

STATEMENT OF COMMISSIONED OFFICERS AND THEIR DISTRIBUTION.

The first is the statement of a distribution by grade and branch of the commissioned officers of the Army; second, a distribution of the commissioned officers of the Army by duties; and, third, the distribution of the enlisted men of the Army, both by branch and somewhat by location.

(The statements referred to are as follows:)

Regular Army commissioned strength March 31, 1922.

[Vacancies in italic. Source of information: Office of The Adjutant General.]

Permanently commissioned.	General.	Major general.	Brigadier general.	Colonel.	Lieutenant colonel.	Major.	Captain.	First lieutenant.	Second lieutenant.	Total.
General officers.....	1	20	46							67
Infantry.....				241	242	663	1,902	1,012		4,060
Cavalry.....				112	140	226	502	222		1,202
Field Artillery.....				27	50	251	483	421		1,232
Coast Artillery.....				70	83	332	345	254		1,064
Corps of Engineers.....		1		40	17	147	170	133		508
Air Service.....				3	11	118	166	609		907
Signal Corps.....				9	8	32	70	33		132
Quartermaster Corps.....				40	90	122	527	219		988
Ordnance Department.....				15	5	116	115	37		288
Finance Department.....				11	20	62	42	13		148
Adjutant General's Department.....				2						2
Judge Advocate General's Department.....										
Chemical Warfare Service.....		1		13	15	51	33			113
Philippine Scouts.....				3	1	15	32	35		86
Bureau of Insular Affairs.....						48	30	68		146
Total.....	1	23	46	586	672	2,213	4,417	3,080		11,018
Medical Corps.....			2	42	93	491	498	14		1,140
Dental Corps.....				8	15	63	145	5		236
Veterinary Corps.....				4	4	16	26	102	5	161
Medical Administrative Corps.....							51	20	67	138
Chaplains.....					10	7	44	118		179
Military storekeeper.....						1				1
Professors, United States Military Academy.....				5	2					7
Total.....			2	59	128	578	764	250	72	1,662
Aggregate.....	1	23	48	645	800	2,791	5,181	3,319	72	12,880

Of the above table, officers serving details away from their own branches, in the branches listed below, were as follows:

Serving details in—	Colonel.	Lieutenant colonel.	Major.	Captain.	First lieutenant.	Total.
War Department, General Staff.....	37	28	27	2		194
General Staff with troops.....	36	26	37	1		100
Air Service.....		1	7	19	29	56
Signal Corps.....				43	6	49
Quartermaster Corps.....				33		33
Ordnance Department.....				13	2	15
Adjutant General's Department.....	27	27	45	2		101
Finance Department.....			5	1		6
Chemical Warfare Service.....				1		1
Inspector General's Department.....	15	17	22	2		56
Judge Advocate General's Department.....				1		1
Bureau Insular Affairs.....	1		1			2
Total.....	116	99	144	118	37	514

¹ Includes 16 additional members from noncombatant branches.

² Includes 24 majors and 1 captain detailed as acting General Staff officers.

³ Includes 1 colonel and 1 major detailed as additional members of the War Department General Staff.

⁴ Includes 2 colonels detailed as additional members of the War Department General Staff.

Actual strength—Distribution of active Regular Army officers, March 31, 1922.

	Staff and instructors.	Students.	Active Regular Army officers.
PART I. DUTIES INDEPENDENT OF ENLISTED STRENGTH OF REGULAR ARMY COMPONENT.			
I. General administrative and overhead:			
1. War Department General Staff.....			99
2. Offices chiefs of branches.....			463
3. Civil, semimilitary, and military duties.....			311
4. Corps area staffs.....			422
5. Depots, arsenals, hospitals, and miscellaneous.....			1,050
Total.....			2,345
II. Service schools:			
1. General service schools.....	82	360	442
2. Special service schools.....	645	1,239	1,884
3. United States Military Academy.....	180		180
4. Technical schools, etc.....		108	108
Total.....	907	1,707	2,614
III. Reserve forces:			
1. National Guard.....			233
2. Organized Reserves.....			270
3. Reserve Officers' Training Corps.....			642
4. Training centers.....			151
Total.....			1,296
Total for duties independent of enlisted strength.....			6,255
PART II. DUTY WITH REGULAR ARMY COMPONENT.			
IV. Expeditionary force in United States:			
1. Active regular units.....			4,265
V. Coast defenses, United States:			
1. Coast Artillery officers.....			362
2. Air Service and staff officers.....			123
Total.....			485

Actual strength—Distribution of active Regular Army officers, March 31, 1922—Continued.

	Staff and instructors.	Students.	Active Regular Army officers.
PART II. DUTY WITH REGULAR ARMY COMPONENT—continued.			
VI. Insular garrisons:			
1. Philippines.....			70
2. Hawaii.....			42
3. Panama Canal Zone.....			37
4. Porto Rico.....			37
5. Germany.....			330
Total.....			1,875
Total for Regular Army component.....			6,625

SUMMARY.

Part I.....	6,255
Part II.....	6,625
Total.....	12,880

(a) Total enlisted strength, including 6,956 Philippine Scouts (February 28, 1922), 140,595.

(b) Based upon the returns for February 28, 1922, the distribution of 140,595 follows:

	Regular Army.	Philippine Scouts.	Total.
Infantry.....	48,201	4,086	52,287
Cavalry.....	10,948		10,948
Field Artillery.....	13,149	1,755	14,904
Coast Artillery.....	15,306		15,306
Air Service.....	8,998		8,998
Corps of Engineers.....	4,038	706	4,744
Signal Corps.....	2,888	108	2,996
Quartermaster Corps.....	12,104	194	12,298
Finance Department.....	510		510
Medical Department.....	8,364	107	8,471
Ordnance Department.....	2,833		2,833
Chemical Warfare.....	525		525
Total.....	127,844	6,956	134,800
Detached enlisted men:			
205 Reserve Officers' Training Corps units.....	1,139		
Organized Reserves.....	220		
National Guard.....	342		
United States Disciplinary Barracks.....	591		
General Service and Special Service School detachments.....	1,592		
Other activities, including recruiting, discharge, and replacement camps, service detachments, Army band, military and intelligence police, corps area headquarters.....	1,888		
Total.....	5,772		5,772
Indian Scouts.....			23
Grand total.....			140,595

(c) Grouped by corps areas within the United States and by departments outside the continental United States:

First Corps Area.....	3,883
Second Corps Area (including Porto Rico, 1,397).....	16,925
Third Corps Area.....	9,529
Fourth Corps Area.....	11,403
Fifth Corps Area.....	5,544
Sixth Corps Area.....	5,152

Seventh Corps Area.....	6,311
Eighth Corps Area.....	23,122
Ninth Corps Area (including Alaska, 582).....	16,638
District of Washington.....	3,078
Hawaiian Department.....	11,093
Panama Canal Department.....	7,234
Philippine Department.....	13,962
American forces in Europe.....	6,154
At sea.....	567

Total 140,595

(d) Larger grouping:

Outside United States (including Alaska and Porto Rico).....	40,989
Troops stationed along Mexican border.....	11,869
Three tactical divisions, United States.....	15,624
Nine corps area training centers.....	7,370
Twenty-five coast defenses and other Coast Artillery Corps units at 75 stations in the United States.....	8,567

Total 84,419

Remaining personnel for duty with 205 Reserve Officers' Training Corps units, the Organized Reserves, National Guard, recruiting, and scattered at 119 stations for training and garrison of the more important posts, including general hospitals, disciplinary barracks, general and special depots, and special service schools..... 56,176

Total 140,595

(e) Stations in the United States, 244; stations outside the United States, 45; total, 289.

(f) Special service schools (enlisted strengths included in respective arms):

Infantry School.....	663
Tank School.....	207
Cavalry School.....	493
Field Artillery School.....	529
Coast Artillery School.....	199
Communications School, Air Service.....	47
Field Officers' School, Air Service.....	84
Mechanics' School, Air Service.....	802
Observation School, Air Service.....	410
Photo School, Air Service.....	48
Pilot School, Air Service.....	332
Gunnery Detachment, Air Service.....	11
Airship School, Air Service.....	119
Balloon School, Air Service.....	126
Engineer School, Corps of Engineers.....	110
Signal Corps School.....	187
School for Bakers and Cooks, Quartermaster Corps.....	120
General Administrative School, Quartermaster Corps.....	13
Subsistence School, Quartermaster Corps.....	1
Ordnance Training Company.....	80
Field Officers' School, Medical Department.....	331
Army Medical School.....	188
Army Music School.....	57
Chaplains' Service.....	0
School for Flight Surgeons.....	1
Veterinary School.....	13

Total 5,011

General HARBORD. The national defense act as amended and approved on June 4, 1920, provided for three parts, the Regular Army of 280,000 enlisted men and something like 17,000 officers, the National Guard which is to be composed ultimately of not less than 800 men for each Senator and Representative in Congress, and third, of an Organized Reserve which was to be of such size as the President saw

fit, the number of the officers and grades to be at the discretion of the President.

The law provided for the division of the continental United States into corps areas proportionate to the military population. It authorized the President to keep organized corps, division, brigades, and the customary tactical units and permitted him at the same time to organize armies when he saw fit.

NUMBER OF CORPS AREAS.

We have nine of these corps areas now in the continental limits of the United States and the territorial departments of Hawaii, Panama, and the Philippines. We have still existing three tactical divisions, the first at Camp Dix at present, the second at Camp Travis, Tex., and the third at Camp Lewis in the State of Washington. The reduction of the Army last year to 150,000 compelled the discontinuance of Fourth, Fifth, Sixth, and Seventh Divisions, which were organized under this provision, and also compelled the abandonment of the plans to organize an Eighth and Ninth Division.

The force of 280,000 men allowed in the national defense act was intended in case of war to be mobilized into nine divisions, and we were proceeding to organize the Eighth and Ninth Divisions, and had the other seven organized, when the strength of the Army was reduced to 150,000, and we came down to these three. There are, in addition to those three tactical divisions still existing, four Field Artillery brigades, a provisional one at Camp Eustis, one at Camp Bragg, one at Camp Knox, and one at Fort Sill. There is not in existence anywhere else a unit as large as a brigade.

The mission of the Regular Establishment, which is still unchanged from that which was announced for a strength of 280,000 men, may be stated as follows: First, it has the duty to train and develop the National Guard and Organized Reserves, which are the two great branches of the citizen soldiery, and we consider this our principal mission to-day in the Regular Army. We have now employed all the forces we have to spare, some 965 officers and 1,800 soldiers, on this duty, and would have more on that duty if we had more officers and more soldiers.

SCHOOLS FOR TRAINING OFFICERS.

The second of our missions is to maintain the necessary schools for the training of the officers and enlisted men of the Regular Army and of the Organized Reserves and of the National Guard. It is in that way that we hope to preserve the lessons which were learned in the war. It is in that school that we expect to inculcate a common doctrine throughout all the units of the Army; that is, meaning the three-part Army, the National Guard, the Regular Army, and the Organized Reserves. It would give us a common spirit and a common policy in all three arms.

These schools are principally for officers. They consist of the Military Academy of West Point to start with, and of the special schools for each of the Army's branches, the general service schools at Fort Leavenworth, and the Army War College. Including the staff, students and faculty, there are a total of 2,671 officers and 5,612 soldiers on military duty with these several institutions.

ADMINISTRATION OFFICERS.

The third mission is to maintain the administrative overhead for the entire three-part Army. That would include such things as the War Department itself, the corps area headquarters, the department headquarters, all the various depots of the country, the arsenals, the general and station hospitals and similar institutions.

The strength that is employed on these duties bears no particular ratio to the size of the Regular Army. That is, those have to go on for the three-part Army whether the Regular Army is small or large, and naturally the smaller the Regular Army, the fewer men that can be employed on this, and the heavier the duties. It bears no real ratio to the strength of the Regular Army.

We have now 2,276 officers and 14,719 soldiers on this duty. This, mind you, is the overhead not for the Regular Army, but for the whole of the Army of the United States, including the Organized Reserves and the National Guard.

PEACE-TIME GARRISONS FOR THE COAST DEFENSES.

The fourth mission is to provide the peace-time garrisons for the coast defense. We have 25 of the coast defenses, and with the strength we now have are manning 13 of them. Practically there is nothing in excess of a caretaking detachment south of Charleston and north of Boston.

We have 477 officers and 6,592 men on the coast defenses in continental United States.

PEACE AND WAR GARRISONS FOR OVERSEAS POSSESSIONS.

The fifth mission is to provide both peace and war garrisons for our overseas possessions; that is, Panama, which we so regard, and Hawaii and the Philippines. The Army, in case of trouble there, is the only safeguard for the lives and property of Americans who live there, and we feel that the obligation to maintain a sufficient force there to always maintain order is very strong. It is a very strong and unmistakable obligation on the part of the United States.

Senator HITCHCOCK. Are you speaking there of any particular place?

General HARBORD. All of them. I have in my mind more particularly the Philippines than Panama, for example, although it is a situation that might arise in Hawaii, where 40 per cent of the population is alien—or alien born. If we ever went into war again our overseas garrisons would be “as is, where is”; that is, we would not be able to reinforce them after war started.

If, in anticipation of war, we undertook to reinforce them, it would probably precipitate matters, and we know in one case in the last 20 years; that is, in the war between Russia and Japan, that an overt act on the part of one of the belligerents preceded the declaration of war; so that it is not considered practicable to reinforce these garrisons when war is threatened, and it probably is not in the event war is declared, afterwards. We feel that if we are going to war, these garrisons will probably remain as the emergency finds them. In my judgment, it is a common-sense matter to maintain

those garrisons at the proper strength, and not reduce them as would be required by this bill.

Senator LENROOT. Are you going to give the numbers of officers and men we have in each place?

General HARBORD. The number that we now have is 1,907 officers and 34,670 men.

Senator LENROOT. Will you give those locations, where those men are?

DISTRIBUTION OF MEN.

General HARBORD. There are 1,345 in Porto Rico, which I did not mention. There are 9,884 men in Panama, 8,012 in the Philippines, and 14,817 in Hawaii, making 34,058. I do not include the force in Germany, because they are under orders to return to this country, and by the end of the fiscal year that force will be at home.

Senator HITCHCOCK. Do you include in the Philippines force those that are now in China?

General HARBORD. These two battalions of Infantry in China are rated as belonging to the Philippines garrison.

Senator HITCHCOCK. Will they be left in China?

General HARBORD. The Secretary of State does not think that they ought to be withdrawn from China at the present time, and I know of no present intention to withdraw them.

EMERGENCY FORCE.

The sixth mission is to maintain a body ready for emergencies, to perform duties that our people have always been accustomed to expect of the Regular Army. It is a body that is to be ready for emergencies, and after making the deductions I have made for the other missions, it leaves a force of about 82,000 men, taken at our present strength. It is a force that goes to the rescue when we have riots, as for instance when we had a race riot in the city of Washington two or three years ago; it is the force that went to the rescue of the city of San Francisco in the earthquake. It is the force that functions in emergencies like that of the flood in Dayton, Ohio; it is the force that furnishes the guard in such cases as the Knickerbocker Theater disaster a short time ago in this city. It was the force which sent troops to West Virginia during the lawlessness there a short time ago.

Senator HARRIS. These 82,000 men are in continental United States?

General HARBORD. They are in the continental United States. This is the only disposable body for emergencies.

Senator HITCHCOCK. Are these all combatant troops?

General HARBORD. No; it includes their share of supply troops. They include the service of the interior.

Senator HITCHCOCK. Just where are these troops located?

General HARBORD. The largest number of them are along the southern border. About 25,000 of them are located in the Eighth Corps Area. The rest of them, if you count those that are in caretaking detachments and things of that sort, are probably located in 200 different places scattered over the country in small detachments of varying size. Generally we expect the present distribution of the whole amount of a reinforced brigade, that will amount to

3,000 to 5,000 troops, in each of the nine corps areas, exclusive of the larger body along the southern border, which has 25,000 men, as it has had for many years. Taking out the 25,000 for the southern border, that leaves a force of approximately 50,000 to do this service for the rest of the country.

REDUCTION IN NUMBER OF ARMY POSTS.

Senator HITCHCOCK. In the event of a reduction in the Army you of course would reduce the number of posts that you are now undertaking to maintain in some form?

General HARBORD. Yes; we would.

Senator HARRIS. Even if the Army is not reduced, do you not think it will be better to have fewer posts to concentrate so as to save expenses?

General HARBORD. I do think so; but there is one consideration that prevents any extreme concentrating of the Regular Army, and that is the necessity of having a demonstrating body, and one that can assist in the training every summer of the organized reserves and the National Guard, who are located under the authorization of the defense act, according to the population; the whole country being divided into corps areas, with provision that there shall be one division of organized reserve or National Guard in each of these areas. That means we must have a large enough force to prepare the camps and perform all the duties that are continuing in their nature, and in each of these districts you have to have such a body, and the troops are bound to appear in at least nine groups over the country.

Of course our old posts do not always lend themselves to those purposes. They were built in the Indian days, in the old days of the development of the West, and they do not always lend themselves to that distribution.

Senator LENROOT. How many have you now—different posts?

General HARBORD. I could not say, off-hand.

Senator LENROOT. You have more than nine?

General HARBORD. Oh, yes; I do not mean to say that we have only nine posts; I meant that we have at least nine groups of those troops.

Senator WADSWORTH. There are over 280.

General HARBORD. We have something over 200.

Senator LENROOT. I would like to have that accurately.

General HARBORD. I can get that for you.

Senator WADSWORTH. My recollection was that we had 290 posts in the United States.

General HARBORD. We have over 200.

Senator WADSWORTH. We have garrisons in every War Department station, even where there is only one person stationed.

General HARBORD. I think I have here a table that will give you all that. Exclusive of the troops along the border and in the Corps Areas, at schools, in tactical divisions, we have at the 25 coast defenses and other C. A. C. units at 75 stations in the United States, 8,567. The remaining personnel for duty with 205 R. O. T. C. units, the Organized Reserves, National Guard, recruiting, is scattered at 119 stations for training and garrison of the more important posts, including general hospitals, disciplinary barracks, general and special depots, and special service schools. 56,176.

NUMBER OF STATIONS.

The number of stations in the United States is 244 and outside of the United States 45, making a total of 289.

Senator LENROOT. Could not those be reduced with economy to the Government, General?

General HARBORD. I think so; yes, sir.

Senator LENROOT. Will you go into that before you get through?

General HARBORD. I can say that we are considering that matter.

Senator LENROOT. I mean, are you prepared to discuss it in connection with your appropriation?

General HARBORD. The discussion of that was to be handled by General Lassiter.

Senator LENROOT. I mean, it will be discussed before you get through?

General HARBORD. Yes, sir. This force that I speak of performs the functions that our people expect from the Regular Army. It must be a well-balanced force, including all of the Arms, and be will distributed over the entire area of the United States, so as to meet conditions of domestic violence, which we feel that it is the part of neither an alarmist or a weakling to anticipate.

There are in this country many communists, Reds, and Pinks, and an organized minority that is arrogant. We have had two requests for troops this week at the War Department. In the two years from June 1, 1915, to June 1, 1917, there were 400 calls for the use of regular troops in this country, which seems a tremendous number.

Senator LENROOT. How many were granted?

General HARBORD. I could not say.

Senator LENROOT. Not a great many?

General HARBORD. Not a great many; no. We have now available not more than one soldier to every 60 square miles in our country. Excluding the border troops we have less than one soldier for every 2,500 citizens of the continental United States.

As the chairman of the committee has stated on at least one public occasion, the Regular Army is expected to be ready to fight always; to be trained and ready to fight at a moment's notice, and with no necessity for delay for expansion or for training. It is supposed to be able to take the field. Under the strength of 280,000 it was expected to mobilize nine divisions in case of war.

ORGANIZED RESERVES.

The Organized Reserves now number 54,000 officers and few enlisted men, and there are about 11,000 other reserve officers not yet assigned to reserve organizations. As only veterans or men trained otherwise, competent to act as noncommissioned officers and specialists, are desired in the reserve in peace, the enlisted contingent will always be trifling compared to the commissioned strength. The interest of the reserve officer can not be maintained without training at sufficiently frequent intervals as to keep him in touch with military progress and to stimulate his zeal. The law permits 15 days each year, but not more than that without the consent of the officer. The estimates of the War Department for 1923, \$3,927,000, would train 28,000 officers for 15 days, send a considerable number of them to the special service

schools, and permit a certain number to be used in connection with the R. O. T. C. and civilian training camps. The amount allowed by the House bill, \$250,000, would enable us to train about 1,000 officers. The institution can not be held together unless we can do better than that, with some opportunity for training and something to stimulate their interest and keep them abreast of military progress.

Where an officer is a suitable man and he is willing to give his time, it has been customary to send them to the special service schools. We have to-day 80 or 90 National Guard officers at Camp Benning, and a number at Fort Riley, the Cavalry School, and a corresponding number of reserve officers. We intended also with these funds to use a number of officers in training R. O. T. C. units, and we have planned to use a certain number of them in civilian training camps.

The amount allowed by the House will allow us to train 1,000 of those men out of 28,000 a year, and, under those conditions, it is evident that we can not keep up interest on the part of these reserve officers. The organizations can not be held together unless we can do better than that. The feeders to the Officers' Reserve Corps are the Reserve Officers' Training Corps and the civilian military training camps. The latter gets together a number of young men who do not, for some reason or other, have an opportunity to go to colleges. The amount allowed by the House bill for 1923 will not permit the R. O. T. C. to be trained in 1923 camps. In other words, if the same amount is available for the R. O. T. C., we shall not be able to train them in camps next year. The greater bulk of the appropriation will be used up in providing clothing, commutation, and getting other supplies during the school year. It is required that they shall spend a certain amount of time in camp. That is a requisite for their being accepted in the reserve. We never take them until they have had this training in camp in addition to what they have had in the colleges.

Senator WADSWORTH. How long is the camp, five weeks?

General HARBORD. Five weeks.

CIVILIAN MILITARY TRAINING CAMPS.

Senator WADSWORTH. You have been holding those camps every summer?

General HARBORD. We held them last summer and are hoping to hold them this summer.

Senator WADSWORTH. What is the particular amount of money involved in that?

General HARBORD. The particular amount of money that was cut out for training camps for next summer was \$500,000. We had anticipated a demand for attendance at the civilian military training camps this year of 50,000. We had applications from over 40,000 last year, but were only able to train about 11,000. The President and the Secretary of War had given out the hope that we would be able to handle over 50,000 this year, and we did expect to handle at least 30,000; but the House bill gives us only \$1,800,000, and throws the burden of the work on our regular appropriations. They put that burden on the regular appropriation for the Army, which can not bear it.

Senator HARRIS. How much additional appropriation will be needed to carry out that which you planned for this year?

General HARBORD. What we needed for the Organized Reserve for the year was \$4,440,000, \$3,927,900 for the Officers' Reserve Corps and \$517,465 for the Enlisted Reserve Corps. We asked for \$30,000,000 for the National Guard, \$4,440,000 for the Organized Reserve, \$4,000,000 for the Reserve Officers' Training Corps, \$2,700,000 for the civilian military training camps, making a total for those purposes of something less than \$50,000,000.

Senator HITCHCOCK. What was that cut down to?

General HARBORD. It was cut down in the case of the Organized Reserve to \$250,000.

The R. O. T. C. was cut from \$4,000,000 to \$2,750,000; the National Guard appropriation for camps of instruction was \$6,000,000; the House bill provides \$6,500,000, which would permit the holding of summer camps. This relates to the National Guard, however.

Senator HITCHCOCK. You got all that you asked for for the National Guard. Your shortage is only for these training camps?

General HARBORD. We did not get all we asked for for the National Guard, Senator. We asked for \$30,000,000, and we are getting about \$21,000,000, as the total.

The cost of handling one National Guard soldier for one of these summer camps is something like \$50, and with the amount that they allow us, it would let us train in the neighborhood of 115,000, while we actually had in March 145,000, and we expect to have before the end of the fiscal year in the neighborhood of from 160,000 to 170,000.

ISSUE OF CLOTHING TO TRAINEES AT CIVILIAN MILITARY TRAINING CAMPS FROM RESERVE STOCKS.

In this appropriation for the civilian military training camps the issue of clothing from the surplus and reserve stocks was permitted—that is, gratis clothing.

We have no criticism to make on the issue of clothing from surplus, but the matter of the issue of clothing from reserve stocks is a very serious matter, to which I will refer a little bit later.

For 1923 we asked for \$30,000,000 for the National Guard, \$4,440,000 for the Organized Reserve, \$4,000,000 for the Reserve Officers' Training Corps, \$2,700,000 for the civilian military training camps, a total of less than \$50,000,000. I understand that the interest on our public debt for 1923 will be \$951,000,000. We feel that that largely grew out of unpreparedness, and a sum of that sort, if it had been applied in the same way as we propose to apply this, for the training of a citizen soldiery, would have provided for this for 19 years—the interest on the public debt for one single year. The issue of clothing without a provision for its replacement I believe to be unsafe and unsound. Those reserves are kept on hand so as to supply the force we would mobilize from the Regular Army, the Reserve, and the National Guard in case of war, until such time as quantity production could be reached in our country.

Senator HITCHCOCK. What force does that contemplate supplying?

General HARBORD. Roughly, 54 divisions. It is the force of about six armies.

Senator LENROOT. Give us the number of men.

General HARBORD. I can not give it to you. It is about 2,000,000 men.

Senator LENROOT. Are we keeping reserves for the supply of 2,000,000 men?

General HARBORD. Reserves in stock.

Senator LENROOT. We are keeping reserves of stock for 2,000,000 men?

General HARBORD. Yes, sir; enough to furnish supplies for such period as would enable us to reach quantity production in this country.

Senator HITCHCOCK. We have 3,000,000 rifles on hand. General, I do not know about your figures in regard to the interest on the public debt. I do not know that they ought to go without being challenged. Forty per cent of our debt was incurred in order to help the other nations that had been preparing for war all the time.

General HARBORD. I simply made the statement that the interest on our public debt would be \$951,000,000, and if that had been applied at the rate that we wished to apply money this next year, it would have seen us through on training for 19 years.

Senator LENROOT. Do you want to leave the implication that if we had used that in military training we would have avoided this debt?

General HARBORD. I think we would have avoided a good deal of it; yes, sir. I certainly do. I believe that if we had had this national defense act and had been living up to it and had been carrying out the provisions of that act, the condition of Germany, looking to our going into the war, would have been very different, and we might possibly have been saved from going into the war. I think that if we had had the force that this national defense act, carried out in good faith, would give us, there is a possibility that the entire war would have been avoided. That is the way I feel about it. Of course our enemies in this case did not credit us with the ability to raise and transport and land an army at all. The judgment of their best military students was that we could not raise, transport, and land and supply an army big enough to be a factor in determining the war. And our allies felt the same way.

Senator LENROOT. So that if they had given us credit for the ability on our own account, I do not know that the result would have been any better for the world, do you?

General HARBORD. I do not know about that. I do not know that it would. I think that war is not an undesirable thing, Senator Lenroot, under many conditions. I think there are many worse things than fighting.

Senator HITCHCOCK. It turned out that the Old World ideas of preparedness were wrong, did it not?

General HARBORD. The Old World ideas of preparedness did not turn out to be wrong. If we had not had gallant little France to hold the line with England until we could come in the result would have been different. France was better prepared than any other nation over there—not for aggression, but for defense.

Senator HITCHCOCK. I say that the Old World idea of preparedness, and their idea that we could not get in, and of the absolute necessity of preparedness, were all wrong; it turned out that they were wrong?

General HARBORD. I do not quite follow you on that, Senator. How was the war won? We were not prepared, and we had to spend a tremendous amount of money to do what we did.

Senator HITCHCOCK. They were entirely deceived. They thought that we were unprepared and that it would not be possible for us to get into the war in time at all, and almost in a year we jumped in and settled the war. They did not think it possible.

General HARBORD. It was more than a year before we jumped at all, Senator, and we would not have been in position to jump if somebody else had not held the line while we were getting ready to jump.

Senator HITCHCOCK. Yes; but the fact was that this unprepared Nation, which had saved its reserves, contrary to the opinion of all these nations, was able to prepare and get in.

Senator SPENCER. The question is whether we would care to risk a year's delay again.

Senator HITCHCOCK. I do not suppose that I ought to get into an argument with the general on this. I think it should be considered that the reason we had these thousands of millions of dollars when we went into the war was due to the fact that we had not been squandering it on military preparedness the way Europe had.

General HARBORD. I do not quite follow you on that, Senator; but that is not for me to say.

Senator SPENCER. I am inclined to think that the general's statement will stand as pretty nearly true.

RESERVE STOCKS.

Senator LENROOT. Before you digress: With reference to this reserve; of course, this reserve stock will soon have to be disposed of—after a few years?

General HARBORD. Certain parts of it; yes, sir.

Senator LENROOT. Is it the policy that we replenish that and keep up reserves for 2,000,000 men?

General HARBORD. There are certain things we expect to replenish.

Senator LENROOT. Like clothing?

General HARBORD. Things like ammunition, and articles of that sort—munitions in general, principally ordnance.

Senator LENROOT. Like rifles?

General HARBORD. Yes; rifles and our cannon—things of that sort. Our supply also of certain kinds of raw materials.

Senator LENROOT. But you would not keep up as large a reserve as you have now of other things, where you had them left over from the war?

General HARBORD. No; we are disposing of those things.

Senator WADSWORTH. I do not understand that you have a reserve of all necessary articles to equip 2,000,000 men?

General HARBORD. Not by any means.

Senator WADSWORTH. You certainly have no such reserve of clothing?

General HARBORD. We have no reserve of anything that can be bought in the open market, that everybody knows can be bought on short notice.

Senator WADSWORTH. You have not any large reserve of under-clothing?

General HARBORD. No; we would not keep a reserve of under-clothing for 2,000,000 men.

Senator WADSWORTH. Or of shoes?

General HARBORD. No.

Senator WADSWORTH. Or of hats?

General HARBORD. No.

Senator WADSWORTH. Or overcoats?

General HARBORD. No.

Senator WADSWORTH. Or slickers?

General HARBORD. No.

Senator WADSWORTH. What are the principal items of which you have a large reserve?

General HARBORD. Well, the principal thing, of course, relates to ordnance—that is, supplies that go to the making up of ammunition and cannon. We have these rifles left over from the war.

Senator SPENCER. And revolvers?

General HARBORD. And revolvers. All of those things that go along with the men.

Senator WADSWORTH. Vehicles?

General HARBORD. Vehicles.

Senator WADSWORTH. Tentage?

General HARBORD. Some tentage.

Senator WADSWORTH. Blankets?

General HARBORD. Such things as that.

Senator WADSWORTH. I happened to recall some of the items that I have seen in the tables.

Senator SPENCER. What do you mean by vehicles?

General HARBORD. Some motor vehicles, and also animal-drawn vehicles, wagons and water carts, and so on.

Senator LENROOT. Do you not think that comes in the category of ordinary motor vehicles that can be replenished very quickly in cases of emergency?

General HARBORD. There are certain types of automobiles, etc.—

Senator LENROOT. Trucks?

General HARBORD. No.

Senator LENROOT. There is a tremendous quantity of trucks?

General HARBORD. We have thousands of vehicles of special types: ammunition trucks and tractors, and things of that sort, that are not commercial articles.

Senator WADSWORTH. You have not got the ordinary motor trucks in such large numbers as to constitute a reserve for anything like 2,000,000 men?

General HARBORD. No; we have nothing more than the reserve for the units we have, in those things.

Senator LENROOT. The aim is to keep a reserve of all of those things that can not be readily procured?

General HARBORD. That can not be readily procured, and that it requires time to prepare for the production of in quantity. That is the test, the time between a declaration of war and the date when quantity production could be reached.

Senator HITCHCOCK. General, I find that while we have 3,000,000 rifles on hand we are still employing 200 men making rifles. Do you think that is the right policy?

General HARBORD. I am unable to give you an answer on that, Senator, offhand, as to numbers employed.

Senator WADSWORTH. That is at the Springfield Arsenal.

General HARBORD. I assume those are men employed in keeping pace with experiments, trying out new rifles and similar work.

Senator HITCHCOCK. It is not given to us that way. It is said to be for the purpose of keeping trained men.

General HARBORD. There is no doubt but that we do not want the art to be lost of the manufacture in certain lines.

Senator HITCHCOCK. They are manufacturing a great deal of powder, and still we are selling it, just to keep men busy.

General HARBORD. Yes; that is the correct principle to keep the art alive.

Senator HITCHCOCK. Do you think that is the correct principle?

General HARBORD. Yes.

Senator WADSWORTH. We are not manufacturing it——

Senator HITCHCOCK. Yes; we are manufacturing powder at 40 cents and are selling powder at 3 cents.

MILITARY INTELLIGENCE DIVISION.

General HARBORD. I wanted to speak about an item which is rather small in comparison, but which I consider to be very far reaching in its effects, and that is the \$100,000 for military intelligence. We asked for \$225,000 for military intelligence and the item was reduced in the House bill to \$100,000. There is a mass of information on political, economic, and military matters that flows into the various departments of the Federal Government. This was true before the war, and our part in the war has greatly increased it in amount and importance. A correct understanding of the foreign conditions is more essential to the War Department than ever before. We have arrangements with the other Federal departments which makes this information, or such of it as is thought to be of military value, available to the War Department. We feel that economic and political disputes are the fundamental causes of wars, and that when they do not dominate the distinctly military plans for hostilities, yet trustworthy information as to these questions, particularly from the military angle, is the basis of any well conceived plan for defense. It is, indeed, not only essential for war, but is necessary for the maintenance of peace.

Senator HITCHCOCK. Was this in the House bill?

General HARBORD. It was reduced from \$225,000 to \$100,000. Of the \$225,000, we asked for, about one-half of it is for pay of clerks to handle this information that comes from all branches of the Government, and to make it available to the War Department. For example, about one-third of this clerical hire is for those who make available such geographic data of foreign countries. The map collection is believed to be more complete as to foreign countries than any other in the United States. About \$15,000 is for handling all transactions for the War Department. The foreign technical papers and pamphlets, now appearing as a result of the war, are invaluable to all services; and timely information along this line saves much costly experimentation. The other one-half of this appropriation is for the collection of information; a large proportion of it geographic; part through the military attachés' offices; part through the headquarters of our overseas commands. Little of it goes to the corps areas. Except along our southern border:

the funds to these headquarters are limited to the amounts necessary to purchase a few newspapers, maps, and books for the better understanding of local conditions. To leave the amount at \$100,000, as placed by the House appropriation bill, does not mean cutting these activities in half but the elimination of certain of them, as they have already been reduced to the limit of useful expense by the Budget allotment of \$225,000. In order to carry on usefully with this sum it has been necessary to close nine military attachés' offices, and otherwise reduce the personnel both at home and abroad. I do not feel that we can get along with that amount and do the things we really feel that we should do. I do not feel that this comparatively small amount can be reduced without distinct disadvantage to the service of the country.

Senator HITCHCOCK. You do not know what the number would be?

General HARBORD. No, sir; I will supply the figures, if I have them.

Senator WADSWORTH. Practically all under military intelligence?

General HARBORD. We had practically none; we had two officers and three or four clerks who were detailed on it and were working in the War College.

Senator HITCHCOCK. Some reduction could be made without wrecking the whole plan; could you not point out the most essential things?

General HARBORD. I do not think any considerable reduction could be made in it, Senator.

Senator HITCHCOCK. The House cut from \$225,000 to \$100,000.

General HARBORD. Yes; they did.

Senator HITCHCOCK. Is there not some middle ground?

General HARBORD. I do not think there is any middle ground without the elimination of some of the activities. In order to get along on that \$225,000 we have had to close out nine of the offices of military attachés in such countries as Czechoslovakia and the Scandinavian countries; in order to keep it going we had to decide between the relative importance of these places and eliminate those that are not the most important.

Senator HITCHCOCK. They do not come out of the diplomatic fund?

General HARBORD. No.

Senator HARRIS. Do you recall any other countries from which they have been withdrawn?

General HARBORD. We eliminated them from several countries; for example, we have eliminated them from Ecuador, Hungary, Czechoslovakia, and the Scandinavian countries, Norway, Sweden, and Denmark.

Senator HARRIS. Is it not important to have those men there?

General HARBORD. I think it is important. We have had recommendations from the ministers to those countries, particularly from the minister of Czechoslovakia, who contends it is the storm center of Europe; it has Hungary on the one side and Germany and Poland on the other, and he feels we are neglecting a valuable opportunity in not having officers there. On the other hand, we had to reduce somewhere, and we felt that by having somebody in Germany and in Poland and in Austria, we would virtually surround this place and get the same benefit. We did not feel it as important as the minister thought.

Senator WADSWORTH. I assume that will be discussed in executive session when the Chief of the Military Intelligence Service comes before us?

General HARBORD. I think so. We are asking very little more: the mission of the Regular Army is still unchanged from what it was when we had a personnel of 280,000. It has dwindled down now to 150,000 and we do not think we can do with much less than that. Something will have to go, either the training of the citizens, which we regard as our main business, or the coast defense. There is a limit in several branches below which you can not go with safety. I think that in your considerations you should not take any number less than 150,000. We do not feel that even with less than that number we can do with any less Cavalry than we have. We feel it would be a mistake to reduce the Field Artillery. With the allowance we have had to make for the new units of the Air Service, Motor Transport, and Tank Corps, and things of that sort, we now have 38 regiments of Infantry as compared to the 65 regiments that we had in 1916.

Senator LENROOT. You have the same-sized personnel?

General HARBORD. Practically about the same; we have a few more in the Infantry regiments; we then had 25 regiments of Cavalry, where now we have 14 regiments; 21 regiments of Field Artillery, where we now have 18. Of course, the new units are essential and necessary, but they do not diminish the necessity for the other branches; we should have a total of 150,000 to allow for Infantry, Field Artillery, Cavalry, etc.

Senator LENROOT. But those new units do assist?

General HARBORD. Yes; but the war is not won by those new units. The Infantry and Artillery would still be our main reliance. Now, if 150,000 men can not be had, then Congress ought to restate our mission for us.

Senator HITCHCOCK. You have 150,000 men now.

PRESENT STRENGTH OF ARMY.

General HARBORD. That is the authorized strength; we actually have 130,000, because we have allowed it to run down by failing to recruit.

Senator HITCHCOCK. Now, then, you are getting back from Germany something like 15,000 men.

General HARBORD. Oh, no; no, sir; we never did have 15,000 men there, Senator, since the troops came home from the American Expeditionary Forces. We had about 12,000 when we began to reduce last fall. We reduced it then to practically 5,000, and then began further reducing that in the latter part of February. We have there now about 3,000 men.

Senator HITCHCOCK. So with the last of these out of Germany you will have 12,000 men to add to the forces in continental United States?

General HARBORD. I have already added those in the figures I have given you.

Senator HITCHCOCK. And that makes it about 130,000?

General HARBORD. Yes; about 130,000.

Senator HITCHCOCK. But that will put you on a stronger basis than you were last fall.

General HARBORD. I can not say as to that. Of course we were in the situation last fall of suddenly reducing from something over 200,000 down to 150,000.

Senator HITCHCOCK. Then you will get a couple of thousand back from China?

General HARBORD. No; we do not expect anything of that sort; we have two battalions—

Senator HITCHCOCK. Under our new treaties will they not come back?

General HARBORD. What is that?

Senator HITCHCOCK. Under our new treaties will they not come back?

General HARBORD. We have no idea of reducing the troops in China. They are there to guard the railroad from Tientsin to the capital.

Senator HITCHCOCK. I thought that was a part of the arrangement, that the United States should withdraw her soldiers?

General HARBORD. No, sir.

Senator LENROOT. The treaties provide they shall withdraw when China shows her own ability to protect that territory.

General HARBORD. Those troops that we have there have been there since the attacks on the legations in 1900. We have always since then guarded the outlet to the sea from the capital at Peking. That has been our part of the arrangement—to guard the outlet to the port.

Senator HITCHCOCK. What other countries have soldiers there—Japan, Great Britain, and France; are there any others?

General HARBORD. No; only the United States, on this railroad guard.

Senator HITCHCOCK. What is that?

General HARBORD. I do not know as to others, sir.

Senator HITCHCOCK. Japan, France, and Great Britain, and the United States are the only ones?

General HARBORD. I do not know about the others; I know it was part of the international agreement made after the close of the Boxer trouble that we should undertake to keep open the railroad from Peking to Tsientsin.

Senator SPENCER. As a matter of fact, we have only two battalions there.

General HARBORD. That is all.

Senator SPENCER. Where the other nations have two full regiments.

General HARBORD. I do not know.

Senator HARRIS. How many marines are there in Peking?

General HARBORD. I think, sir, practically just the legation guard in Peking.

The appropriation as passed by the House is dangerously small, and the instruction, particularly of the National Guard, the Organized Reserve, and the R. O. T. C., civilian military camps, and so on, can not be carried out as Congress wanted.

Senator LENROOT. I would like to ask a few questions about our overseas garrisons. What is the white population of Hawaii?

General HARBORD. Something over 200,000; I think about 205,000.

Senator LENROOT. You think it is necessary to maintain the garrison at its present strength so far as order in Hawaii is concerned?

General HARBORD. Not entirely for purposes of order, necessarily; but we have a very large alien population there and not a very particularly friendly one.

Senator LENROOT. So far as protection is concerned, this is larger than you think is necessary?

General HARBORD. Yes.

Senator SPENCER. General, is not the Japanese population of Honolulu larger than the white population?

General HARBORD. In Honolulu, yes, sir; it is a great deal larger.

Senator LENROOT. Now, you spoke of the undesirability of increasing these garrisons in the event of friction and strained relations.

General HARBORD. Yes, sir.

Senator LENROOT. And the importance of doing it; in case of war, if our own Navy could not protect Hawaii, we will say, could these soldiers, or any considerable increase in the number of soldiers there, withstand a naval attack in Hawaii; could not the hostile forces take it anyway?

General HARBORD. I think it is better stated that Hawaii protects the Navy than that the Navy protects Hawaii; the protection of Hawaii is necessary to the operation of the Navy.

Senator LENROOT. That would put us in the situation of not getting troops there, General.

General HARBORD. Well, I still stand by that; yes, sir.

Senator LENROOT. Then I want to repeat my question; if we control the sea from here to Hawaii then, of course, we could get troops there.

General HARBORD. We can not control the seas until we have demonstrated naval superiority. When we have demonstrated naval superiority the war is practically ended as far as any overseas fighting is concerned. To demonstrate that naval superiority it will be necessary, in the Pacific, that we have Hawaii and be able to hold it. to take care of the docks there, and the base generally.

Senator LENROOT. That gets right back to my question. What resistance could these 14,000 soldiers make against any hostile naval attack, if a hostile navy had control of the sea?

General HARBORD. We believe we have enough there to prevent landing forces there and prevent the destruction of the dry dock there, and the naval base, so that our Navy may come in there and replenish supplies, etc. Of course, the fact that we have that large alien population makes it very probable that if we had trouble with the particular country from which those aliens come, that there would be a good deal of internal disturbance and that there would be some outbreaks of violence at the Navy base itself, Pearl Harbor.

Without Hawaii, the problem of the defense of the west coast would be a very much more serious one than it is, and that is the cause for maintaining the garrison in Hawaii, and all the men that we have out there more than compensates for the additional defenses we would have to build on the Pacific coast and at Panama if we did not have that garrison there.

Senator LENROOT. Now, my question was that we should look to our Navy for the protection of Hawaii, rather than to the soldiers.

General HARBORD. Not against landing parties, Senator; not for the protection of the naval base except as against the hostile navy.

Senator LENROOT. Of course, if our Navy is strong enough to handle the situation, there is no possibility of landing.

General HARBOARD. No, sir; that is true.

Senator LENROOT. Then, I would like to ask if you have anything to say regarding the policy that would be pursued with reference to the disposition of these men if the House number were retained, or whether your estimate also considers a strength of 132,000? We are getting three different estimates; could you give us any information as to the disposition on the two other estimates?

General HARBORD. I am not prepared to give you that, but it will be handled by other officers who will come before you, Senator.

We feel that the retention of the garrison in Hawaii is so important that we would be disposed to sacrifice troops in other places rather than diminish that garrison, as far as that particular point is concerned.

Senator LENROOT. The same would be true of the Philippines.

General HARBORD. Oh, no; we expect to reduce the garrison in the Philippines.

Senator LENROOT. By how much?

General HARBORD. I could not say in numbers, but we expect to bring out practically all the coast artillery there. We are prohibited by the treaty from changing the status quo there or adding to the fortifications there; and the force there is so inconsiderable that in the remote case of war involving the Philippines it would have to be reinforced.

Senator LENROOT. So whatever number you would withdraw from the Philippines would be added to the forces in the continental United States?

General HARBORD. Yes.

Senator LENROOT. So that we may look for an increase in the forces in the continental United States above the number that you now have?

General HARBORD. Yes; a very small increase, as the number of troops there is not very considerable.

Senator HARRIS. General, when you take the troops away from the Philippines would it not be better to enlarge the garrison at Hawaii?

General HARBORD. I do not think that follows, necessarily, Senator; I do not think that the garrison in the Philippines is any protection to Hawaii at all, not the slightest. We do not intend to strip the Philippines entirely of troops, because we feel we have an obligation there to maintain order, and that there is always the possibility of trouble there, possibly remote, but nevertheless possible, and it is not safe to bring all of the white garrison out of there. We have the 7,000 Philippine Scouts there, of course.

Senator WADSWORTH. Did I understand you to say you are contemplating bringing the coast artillery home?

General HARBORD. Most of it; yes, sir.

Senator WADSWORTH. Have you in your mind how many men would be included in that category?

General HARBORD. Oh, between two and three thousand, I think.

Senator SUTHERLAND. Do you have native soldiers there?

General HARBORD. Yes, sir; we have the Philippine Scouts there.

Senator SUTHERLAND. Are they altogether native Filipinos?

General HARBORD. All natives except the officers; part of the officers are natives and part of the officers are whites.

Senator HITCHCOCK. In the case of outbreak of war involving Hawaii you would expect to have enough troops there to defend the naval base?

General HARBORD. Yes, sir.

Senator HITCHCOCK. And whatever naval vessel happened to be in that neighborhood?

General HARBORD. Yes.

Senator HITCHCOCK. You might not have all the assistance you wanted, but yet feel you could hold the island?

General HARBORD. Yes, sir; that is it. Of course, in the event of war we would hope to raise perhaps as many men from the American and Kanaka population there as we now have with the Regular Establishment there. We would not depend in time of war entirely on the regular garrison we have there; we would hope to raise somewhere in the neighborhood of 20,000 troops there.

Senator HITCHCOCK. Is there a National Guard organization there?

General HARBORD. There is a National Guard organization; yes, sir.

Senator HITCHCOCK. How many of them are there?

General HARBORD. I do not know, sir.

Senator HITCHCOCK. Have they been under training?

General HARBORD. They have had a National Guard for some time. for several years.

Senator HITCHCOCK. You expect to have 20,000 of the white population of Hawaii for that purpose, for recruits?

General HARBORD. We hope to have in the neighborhood of 33,000 to 34,000 men there if war should break out.

Senator SUTHERLAND. In the event of trouble with some other nation, would the Filipinos pretty generally stay with us, do you think?

General HARBORD. They organized a division of the National Guard there during the war and were anxious to get into the service. I firmly thought that the best thing we could do, if we had any trouble with a foreign country, to tie the Filipinos to us, would be to give them a chance under our flag; but it was not thought wise to bring a Philippine division out of there during the war; but they had one raised. I believe that they would stand by us; yes.

Senator HITCHCOCK. General, I notice an item here providing for the making of maps in foreign countries.

General HARBORD. Yes, sir.

Senator HITCHCOCK. Would you consider that was providing for defensive war?

General HARBORD. Well, I do not know. Senator, whether you would call the war that we were in recently a defensive war or not. We have an idea in the Army sometimes that defense is best accomplished by taking the offensive. In war defense does not necessarily imply standing on your own dung hill and fighting there.

Senator HITCHCOCK. Is the making of these maps carried to a considerable expense?

General HARBORD. What do you mean?

Senator HITCHCOCK. Well, I mean, are you expending any considerable amount of money in making maps of the territory in foreign countries?

General HARBORD. That is not entirely in making maps; it is securing maps in some cases.

Senator HITCHCOCK. Well, making or securing.

General HARBORD. Not a great deal; no, sir; but those are not only maps for military purposes, but they have a relation to economic matters, the location of minerals, and things of that sort; and there are a great many phases to that map information.

Senator HITCHCOCK. I would like to ask you, General, to what extent do you think the Army could be reduced from the present limit and still enable you to carry out, with adequate appropriations, the functions with which you think it is vested.

General HARBORD. If I understand you, Senator, you mean how much do you think it could be reduced below 150,000 and still do the things—

Senator HITCHCOCK. Yes.

General HARBORD. That we have to do?

Senator HITCHCOCK. Yes.

General HARBORD. I do not believe we can do the things you expect us to do with less than 150,000 men.

Senator HITCHCOCK. You are doing those things, most of them, with 130,000.

General HARBORD. We are doing them after a fashion, yes; but we are taking the attitude that we have got to be prepared for storms, and we have seen the House bill which provides for the discharge of so many men to come down to a certain strength at a certain time, and to meet that and to prevent the expense which such discharges cost—it costs on an average of \$60 to get a man to his home—we have allowed the recruiting to run down until we see what Congress is going to do to us. It is not because we feel we can function properly with the number we have, but as a measure of safety. The reduction to 150,000 men last year attended, as it was, by the expense of discharge, was far from accomplishing the economies Congress hoped for when it made the reduction, I am very sure, because you have to transport the discharged men to their homes. While you save the pay of the discharged men, subsistence, and uniforms, you paid a great deal for travel; and a great many of them came back in the service afterwards. They all got their allowances when they were discharged. We are allowing the Army to run down partly as a measure of safety.

Senator HITCHCOCK. You observe a lot of these items do not appear to be reduced in proportion to the reduced number of men?

General HARBORD. No, sir.

Senator HITCHCOCK. But with this embarrassment that you have encountered by the limiting of officers, or the limiting of men—

General HARBORD. It is lack of both, sir; we are about 4,000 short on the number of officers. We feel we can get along with 12,000 to 13,000; but we are short.

Senator WADSWORTH. As a matter of fact, governors, universities, and colleges are asking for more officers, are they not?

General HARBORD. Yes, sir; they are.

Senator SUTHERLAND. You are not able to furnish them?

General HARBORD. Not always of the kind and numbers they want; no, sir. Of course they all want the best officers.

Senator LENROOT. You say you are 4,000 short on officers, based on 280,000 men?

General HARBORD. Yes, sir.

Senator LENROOT. Now, with our troops down to 150,000 it would not take the same number of officers to carry out the policy of Congress as it would when the troops numbered 280,000?

General HARBORD. No, sir.

Senator LENROOT. So you would hardly say that with the Army that we have you were short 4,000 officers?

General HARBORD. Oh, nothing of the kind; simply that that is the number short of what were authorized.

Senator LENROOT. Under the law.

Senator WADSWORTH. As I recall it it was brought out before the Military Affairs Committee that with the Army stabilized, as it were, at 150,000 men, and with the means at hand under the national defense act, a steady force of officers in the neighborhood of 14,000, after redistribution had been accomplished would be sufficient.

General HARBORD. Yes, sir; we feel so.

Senator WADSWORTH. I recall you testified that you would have about 13,000 officers.

General HARBORD. Yes, sir.

Senator WADSWORTH. Some of them to be dropped——

General HARBORD. In the reconstruction.

Senator WADSWORTH. Until you got 12,000 and then slowly to be built up——

General HARBORD. From the bottom.

Senator WADSWORTH. Not to exceed 13,000 the next fiscal year.

General HARBORD. And then 14,000

Senator WADSWORTH. Thereafter never to exceed 14,000.

Senator LENROOT. But that is on the basis of 150,000 men.

Senator WADSWORTH. On the basis of 150,000 men; that means as it stands.

General HARBORD. Yes.

Senator LENROOT. But when you cut the Army down below 150,000 there could be a still further proportionate reduction?

General HARBORD. Yes, sir; to some extent.

Senator HITCHCOCK. General, in the event of a reduction to say 125,000, is it not all the more important that we increase these appropriations you request for the reserve and the National Guard?

General HARBORD. Yes, sir; yes.

Senator WADSWORTH. If the number of commissioned officers were reduced to 11,000, as provided under the House bill, would you or not be compelled to withdraw officers from universities and colleges and the National Guard and the Organized Reserves?

General HARBORD. Unquestionably we would have to withdraw some of them.

Senator WADSWORTH. Have you, or has any of your subordinates, made any preliminary estimate as to how many would have to be withdrawn from those divisions?

General HARBORD. I rather think General Lassiter has that; I think his testimony will cover it.

Senator WADSWORTH. The table you submitted at the beginning of your testimony shows distribution of officers at present.

General HARBORD. It shows the officers for March 31 and the enlisted men for February 28.

Senator LENROOT. Now, General, would that be the same distribution practically for 150,000?

General HARBORD. The distribution that I gave?

Senator LENROOT. Yes.

General HARBORD. Oh, yes; it will be about the same.

Senator LENROOT. So that the number of officers you have now for 130,000 would be about the same if the number of the enlisted personnel were increased to 150,000; is that correct?

General HARBORD. About the same; yes, sir.

Senator WADSWORTH. Is your figure of 130,000 an accurate figure, General?

General HARBORD. No, no; it is merely about 130,000; I do not know the exact figures.

Senator WADSWORTH. I understood it was 139,000, including the Philippine Scouts?

Senator SUTHERLAND. How many Philippine Scouts have we, General?

General HARBORD. There are 7,000.

Senator SUTHERLAND. How many actually?

General HARBORD. We have 140,594, including the 7,000 scouts, making about 133,000 in the Army.

Senator WADSWORTH. In the white troops?

General HARBORD. Yes.

PAY OF THE ARMY.

Senator WADSWORTH. As I recall—perhaps you or some member of the committee will correct me if I am wrong—the appropriation “Pay of the Army” for the current year was figured as sufficient to pay 150,000 men, exclusive of the Philippine Scouts?

General HARBORD. Yes; an average—

Senator WADSWORTH (interposing). Yes; an average for a year, of course; and add the Philippine Scouts to that number.

General HARBORD. Yes, sir.

Senator WADSWORTH. My recollection being that as it was debated upon the floor of the House and the Senate the entire force was to be 156,000 and a few hundred?

General HARBORD. Yes; something like that.

Senator SUTHERLAND. Now you have got 140,500?

General HARBORD. Yes.

Senator WADSWORTH. There are three comparable figures here, the one 156,000 provided for in the current appropriation, which was allowed to go down to about 132,000, and if the Army is further reduced to 115,000 that will be a reduction of 14,500.

General HARBORD. About 16,000.

Senator WADSWORTH. The House bill provides for 115,000 white troops.

General HARBORD. And the 7,000 scouts.

Senator WADSWORTH. And the 7,000 Philippine Scouts, making the total 122,000.

General HARBORD. Yes; which makes the total 122,000.

Senator WADSWORTH. That is, 156,000, 132,000, and 122,000 are the three comparable figures?

General HARBORD. Yes, sir.

Senator HITCHCOCK. Does this 132,000 include the 13,000 officers?

General HARBORD. No, sir; that is the enlisted strength.

Senator WADSWORTH. The appropriation called "Pay of officers" for the current year was supposed to be sufficient to pay 14,032 officers. Was it not?

General HARBORD. Yes.

Senator WADSWORTH. And, as I understand it, the Secretary of War has refrained from commissioning second lieutenants?

General HARBORD. Yes, sir; we have commissioned none since August last.

Senator WADSWORTH. And thereby has permitted the commissioned personnel to drop from 14,000 to 12,900, or somewhere in that neighborhood?

General HARBORD. Twelve thousand seven or eight hundred, somewhere along there.

Senator WADSWORTH. Are you familiar, General, with some of the inquiries I sent out to universities concerning the work of the R. O. T. C.?

General HARBORD. Yes, sir.

Senator WADSWORTH. Have you seen this pamphlet that was printed with the approval of the Military Committee?

General HARBORD. I have glanced over it; yes, sir.

Senator WADSWORTH. And did you see the replies to an inquiry which I also sent out to National Guard officers?

General HARBORD. Yes, sir.

Senator WADSWORTH. Who had taken the short course of training in the Army training schools?

General HARBORD. Yes, sir.

Senator WADSWORTH. And did you see the replies I received from the governors of the States concerning the duty performed by the inspector instructors of the Regular Army attached to that grade?

General HARBORD. Yes, sir.

Senator WADSWORTH. What is the impression you got from those replies?

General HARBORD. I got the impression, taking those classes separately, that the presidents of the universities and colleges were very strongly opposed to any movement that would reduce the number of officers the Army had at those institutions; they were all in favor of military training; some of them going so far as to say that the standing of the young men in the nonmilitary subjects was all the better for their having the military training. Almost universally they were in favor of that military training.

The governors were strong to the point of enthusiasm for officers who were detailed with the National Guard of their States. Their report included a good many suggestions as to little changes that might be made, but as a whole they were strongly in favor of them.

The men who went to the schools, like Camp Benning, were quite enthusiastic, but some of them thought that more adequate provision for quarters and things of that sort might be made for them; but they were there temporarily; they were not expected to take families with

them; and I think that was cleared up in their minds finally, which was the only note of criticism there was in the whole list of letters.

Senator WADSWORTH. I doubt if I would be justified in asking the committee to let me put into the record these letters, because in the aggregate they would take up a good deal of room, but they are from several governors, 20 or 30; they are from 43 or 45 college and university presidents, and from a considerable number of National Guard reserve officers who have taken the short course at the Army instruction schools.

They are exceedingly instructive. The letters from the university presidents I have had printed in a pamphlet on the authority of the Military Committee and we have plenty of those for distribution. Of course, I have not had the letters copied, but a large number of the Members of the Senate will find letters from their own governors and from the presidents of various educational institutions in their States, and from many guard and reserve officers who come from their respective States, expressing their opinion of the new military policy laid out in the 1920 act and their personal experiences under it.

Senator HITCHCOCK. It is not very voluminous, is it?

Senator WADSWORTH. In some ways it is.

Senator LENROOT. You could put in some samples of those letters, could you not?

Senator WADSWORTH. I could do that; yes.

Senator LENROOT. I understand from you, General, that the 12,000 officers are not sufficient to carry out this mission?

General HARBORD. If we could get the 12,000 officers with the possibility of building it up to 13,000 in the coming fiscal year and 14,000 in the year afterwards we can get along and do what is expected of us.

Senator LENROOT. And if you only had 12,000 next year with your enlisted personnel kept as it is now for the next year—

General HARBORD. The ratio between the number of officers and the enlisted personnel of the Army does not follow with reduction in the size of enlisted strength.

Senator LENROOT. But it does have some bearing.

General HARBORD. Yes; it does. Of the 13,000 officers you can figure 6,500 for the work of the Regular Army and 6,500 for other purposes; that would be constant.

Senator LENROOT. Would not the reduction in the number of posts have its effect?

General HARBORD. Not very much; every Infantry company should have three officers with it whether it is stationed in a post by itself or in a post with other companies.

Senator LENROOT. Are your units fully manned with officers now?

General HARBORD. No, sir; they are not, not by any means.

Senator LENROOT. Does that mean you have too few officers, or too many units?

General HARBORD. I take it, it is too few officers.

Senator LENROOT. Well, then, if you had only half the number of posts you say there could not be any appreciable reduction in the number of officers required?

General HARBORD. I do not mean to go quite that far, Senator. I said that in general there would not be very much reduction. Of

course, in two posts you have two commanding officers of field grade; if you do away with a post you do away with the services of one of those officers; then there are certain other officers in a post whose work could be consolidated with like work in another post where two are combined; but there can be no reduction of company officers, or regimental officers in bringing two posts together, because that is the number of officers that go with a unit rather than with a post.

Senator WADSWORTH. I can see one of the handicaps now facing the War Department in concentrating the posts, a project which I am personally very much in favor of, and that is that you have not many posts now that will hold any more men than are now in them.

General HARBORD. No.

Senator WADSWORTH. The concentration of posts, the fewer number of posts, will involve a building program at the selected posts?

General HARBORD. It is very apt to because we have those three divisions that we spoke of that are in cantonments—one at Camp Travis, one at Camp Dix, and one at Camp Lewis. We expect to put them, with the exception of the one at Camp Travis, in the posts, scatter them around, break them up as far as being kept together is concerned, and put them in the old posts because those cantonments are at a point where they are no longer habitable in decency for these men; we have to put them in the old posts.

Senator WADSWORTH. That is, with the exception of Travis.

General HARBORD. Yes, sir.

Senator WADSWORTH. Then you are thinking of taking the divisions away from Camp Dix and Camp Lewis?

General HARBORD. We hope to put the division in Camp Dix in the posts around New York Harbor and in the Second Corps Area there without having to go outside of the corps area; and we expect to put the third division in various posts in the Northwest, posts that were built a long time ago.

Senator WADSWORTH. Then, that is really a scattering——

General HARBORD. It is a scattering of the troops to the posts, which, however, does not mean any additional building. It would be necessary to do a great deal of building—of reconstruction and repairing on these cantonments; they have got to the point now where they are falling down—the underpinning has rotted out from under them. They were made out of green timber. At Camp Travis I have seen it hail through the roof of the buildings—a hailstone would strike and come through; the floor would be flooded with rain. Men were leaving the service and were refusing to reenlist because they had to spend their nights in the rainy season moving their bunks around trying to avoid the drip.

Senator LENROOT. How soon are we likely to be called upon for a general building program?

General HARBORD. Sooner or later.

Senator LENROOT. Very soon?

General HARBORD. I do not think very soon, because we are only asking for a reasonable amount of construction at Camp Benning this year in the Infantry post.

Senator WADSWORTH. So, the problem of housing the Army has not been solved yet?

General HARBORD. No, sir.

Senator WADSWORTH. You discussed it last year. Of course, it is fair to say that it is going to be very difficult to secure from Congress considerable appropriations for new buildings for some little time to come.

General HARBORD. Yes, sir.

Senator WADSWORTH. On account of the general conditions.

General HARBORD. Yes; we realize that.

Senator SUTHERLAND. Do you prefer to have the troops concentrated, in the way you suggest, rather than scattered——

General HARBORD. Yes, sir.

Senator SUTHERLAND. Making it necessary to have so many posts?

General HARBORD. Yes, sir; I believe the concentrating is better practice for training, and there are economies——

Senator SUTHERLAND. You think it would pay, then, to abolish a good many of these scattered posts?

General HARBORD. I would like to see them concentrated in large groups, as far as we can; of course, we have got to keep them sufficiently distributed to train the guard and the reserve.

Senator HARRIS. General Harbord, could not we sell these old posts and the property for enough to build additions to the posts where you would want to make the concentrations?

General HARBORD. I think so. There is a considerable list of what we consider surplus real estate that has been for a long time waiting the action of Congress. The Secretary of War submitted to the Military Committee of the House, quite a while ago, such a proposition, but very little has been done about it. We have had very many inquiries and considerable correspondence; but there are numerous pieces of real estate we could dispose of, the proceeds from which will go far to balance what we hope for in other directions.

Senator WADSWORTH. Had you ever given any study to the proposal that we build additional officers' quarters in order to save in the item, "Commutation of quarters"?

General HARBORD. Yes; I have.

Senator WADSWORTH. Do you think it would be an economy in the end if the buildings were properly and economically put up?

General HARBORD. I certainly do, Senator; I think we are spending enough for commutation of quarters to give a reasonable income on the item, "Commutation of quarters"?

Senator WADSWORTH. Officers' quarters?

General HARBORD. Yes, sir; we are spending about \$6,000,000 in commutation in one year for commutation of quarters. That would be a reasonable return on an investment of \$50,000,000, if spent for such buildings.

Senator WADSWORTH. \$6,000,000 is 6 per cent on \$100,000,000.

Senator LENROOT. But that \$50,000,000 spent in building quarters would not take care of as many men as \$6,000,000 in commutation of quarters.

General HARBORD. I say that amount put up in building quarters would return a reasonable income.

Senator WADSWORTH. Have you anything further, General?

General HARBORD. I think not.

Senator WADSWORTH. We are very much obliged to you, General.

STATEMENT OF GEN. WILLIAM LASSITER, CHIEF OF THE OPERATIONS AND TRAINING DIVISION, GENERAL STAFF.

Senator WADSWORTH. Proceed in your own way, General.

ORGANIZATION AND TRAINING OF THE ARMY.

General LASSITER. I am designated to discuss the organization and training of the Army of the United States, both as a whole and as affecting its various components, to show the requirements in officers and funds, and to comment on the House bill as affecting the above.

In considering Army appropriations it is recognized that economic conditions and world conditions should be given their full weight; but also the definite military policy which Congress has adopted by the act of June 4, 1920, should be kept in mind. By this act the foundation and framework for the great national army we would need in a maximum emergency is outlined. Our bitter experiences in the past in the way of improvisations in time of peril has shown us the urgent need of having such a foundation and framework established in time of peace, so that, on the imminence of war, we can readily and economically expand our forces as required.

On the basis of the act of June 4, 1920, the War Department has now laid the foundation required, thus enabling us to develop methodically and with due promptitude a force of about 2,000,000 men. This force is in three parts. About one-sixth is assigned to the Regular Army, about two-sixths to the National Guard, and about three-sixths to the Organized Reserve. Our plans must provide for merging all of these into a homogeneous whole, so that we can have a force complete in all its parts. But all of these parts do not have to be ready for use instantly. Thus, minor emergencies at home or abroad, such as our experiences of the past 20 years show may occur any day, may call for the instant employment of all or a part of our regular forces. Somewhat larger emergencies may require, not only the Regular Army, but also all, or a part, of the National Guard to be quickly available. As for the reserves, we must develop a system whereby reservists will be available for filling up both the Regular Army and the National Guard, but only in a great national emergency would the Organized Reserve, as such, be called into service.

Parts of our military structure may thus be kept in skeleton shape, provided we have the reserve elements to fill them up, but the minimum needed to meet such emergencies as may face us any day should be kept ready for prompt action.

Thus for the first time in our history we have a broad plan for building up at low expense the forces needed in time of great national emergencies. Congress is asked to keep this promising plan in mind and provide the life blood in the way of funds needed to insure the due development of this military framework. If this is not done, the whole system will disappear and we will have to face the next war under the same chaotic conditions as heretofore.

The organization and training of each of the components of our National Army will be discussed in turn.

ORGANIZATION AND TRAINING OF THE REGULAR ARMY.

The Regular Army has been in the throes of reduction and constant reorganization ever since the World War. Due to this unsettled and constantly shifting status it has not been possible to establish the Regular Army on a satisfactory footing and provide properly for its due development. Steps are being taken to rectify this condition, but the policy to be pursued by Congress gravely affects the situation. If the Army is to be reduced and torn apart every year, no morale can be maintained and the Army will always be in a state of disorganization.

The existing strength of the Army will not permit keeping on an active status all Regular Army units comprised in our basic plan, wherein the Army, in addition to providing for overhead, schools, foreign garrisons, and coast defenses, must also be ready to furnish nine divisions for a great national mobilization. Hence our mobilization tables must show many units of the regular divisions as on an inactive status. But while these units are carried as inactive plans will be prepared for raising them to full strength when necessity requires.

Our present authorized strength is 150,000 (exclusive of the Philippine Scouts). From this number 3,031 must be permanently on duty with National Guard, Organized Reserves, and R. O. T. C.; 13,929 are required for overhead of a variety of types and descriptions; 6,057 are employed in running all types of schools; 8,233 are required for our coast defenses; 29,681 (exclusive of Philippine Scouts) constitute our necessary overseas garrisons, thus making a total of 59,931 which must be deducted from our total of 150,000 men and leaving as mobile troops in the United States, 82,607 for combat troops and 7,462 for school troops.

The above deductions of 59,931 men constitute a constant factor, whatever the strength of the Army. We can not reduce our overseas garrisons, nor coast defenses, nor our personnel on duty with civilian troops. This latter figure is in fact apt to be increased. As for overhead, it must be recalled that the Regular Army has to furnish the overhead not only for Regular troops, but for the whole Military Establishment, comprising the Regular troops, National Guard, reserves, etc., and also take care of many nonmilitary activities. Likewise, the Army schools are maintained not only for the Regular Army, but also for the National Guard and the reserves, and though certain changes may be made in the number attending schools, the reduction will not be sufficient to materially affect our number of regiments. Thus, it is again pointed out that we have about 60,000 men deducted from our mobile fighting strength at home, whatever the strength of the Army, and that the combat troops available for duty in the United States Army constitute the difference between what Congress allows and this constant factor. This difference in the case of the Army of 150,000 men is approximately 90,000, though out of this total of 90,000 men about 7,500 men are used as more or less permanently on duty at our various schools to permit practical instruction to go on continuously in war or in peace and, hence, our total of mobile troops available for combat purposes will be 82,000 men.

This force of 82,000 men are not all of one type. The force must be balanced so as to provide men of all arms, and the distribution between arms would be as follows:

Infantry -----	39, 108	Signals -----	685
Cavalry -----	9, 178	Quartermaster Corps -----	4, 283
Field Artillery -----	13, 255	Finance -----	39
Coast Artillery Corps -----	2, 746	Ordnance -----	917
Air Service -----	4, 684	Chemical Warfare Service -----	272
Engineers -----	4, 300	Medical -----	2, 808

Thus, at the present authorized strength of the Army we are able to have only about 39,000 Infantry, 9,000 Cavalry, 13,000 Field Artillery, and 5,000 Air Service in the United States. This, moreover, is on the assumption that all the units are filled up to strength. As a matter of fact, they are far below strength, due to lack of money to move recruits and to the general uncertainties of the existing situation. This full strength, however, is urgently needed if the Army is to possess any readiness to carry out the variety of missions assigned it. We must maintain continuously a large force of troops on the Mexican border, and we must have in every part of our broad country enough troops to meet contingencies always liable to arise and also to assist in the development of the National Guard and Organized Reserves.

Senator SPENCER. Those figures are also based on the fact that every man is at his post; that there is no sickness, or absence, or anything else?

General LASSITER. Absolutely; yes. It is necessary to figure on at least 10 per cent for that deduction.

Our country is divided into nine corps areas according to population. In each one of these we should have a tactical force, balanced as to all arms, capable of carrying on the training of officers to handle the larger bodies of troops, capable of prompt action anywhere as a complete tactical unit, and capable of furnishing the National Guard and Organized Reserves models for each branch of the fighting arms. At 150,000 men we will have the strength to put in three of our corps areas a division and in the other six corps areas most of the elements of a reinforced brigade. This is a limit below which we should not go, and it is consequently urged that the Army be not reduced below its present authorized strength of 157,000 men.

If the Army were reduced to 115,000 men, as proposed in the House bill, the combat troops in the United States would comprise only 61,832 men, which would be wholly inadequate to supply the troops necessary to meet the needs of all the various parts of our country, whether for dealing with local emergencies or for assisting in the development of the National Guard and the Organized Reserves.

CHEMICAL WARFARE SERVICE.

Senator HITCHCOCK. I would like to ask why you provide for the Chemical Warfare Service?

General LASSITER. In the first place because it is required by law, we can not abolish it without some legal action; and the War Department is now studying the question of what should be put up to Congress in that matter.

Senator HITCHCOCK. How many men are involved in that?

General LASSITER. The law calls for 100 officers, and, 1,200 enlisted men for an army of 280,000 men; but we have not that number in it now.

Senator HITCHCOCK. Can you tell about what you have, generally?

General LASSITER. Yes, sir. We have now about 87 officers and about 550 enlisted men.

Senator HITCHCOCK. So if you were to leave out that provision and dispense with that the Regular Army would be increased by 700 men and 100 officers, would it not?

General LASSITER. There would be about 87 officers and 550 enlisted men to be absorbed into other arms and service.

Senator SPENCER. That covers a great many activities that are not prohibited by the treaty, for instance, the development of the use of the smoke screen on land, which they are working on now. That is only an illustration of a dozen or two similar things that were shown here at the hearing the other day.

Senator LENROOT. And the development of gas masks.

Senator SPENCER. And the development of gas masks; that may be eliminated if the treaty goes through.

Senator HARRIS. And they are cooperating with the Department of Agriculture.

General LASSITER. I might say the War Department is studying that question with a view to reducing it to the point we consider would be necessary to comply with the terms of the proposed treaty.

Senator LENROOT. What did the House authorize?

Senator WADSWORTH. \$500,000.

Senator LENROOT. And had no legislative provision in connection with it?

Senator WADSWORTH. No.

Senator SUTHERLAND. The treaties do not involve the abandonment of all research work along that line?

General LASSITER. No; not at all, simply against the use of it in warfare.

Senator SPENCER. We would be very foolish if we did not continue our research work along these lines and know for a moral certainty that if any trouble should break out with nations not covered in this treaty we would be protected against their use of gas in warfare.

General LASSITER. And I think in the discussions leading up to that treaty that that was brought out definitely by the representatives of the foreign nations.

Senator SUTHERLAND. Are those officers in that branch by assignment from other branches of the service?

General LASSITER. No; they are commissioned in that particular service.

Senator SUTHERLAND. Most of them were commissioned originally in the other branches of the service?

General LASSITER. Yes, sir; many of them were.

Senator LENROOT. Can they be transferred to other branches of the service without legislation?

General LASSITER. I do not believe so without legislation; they would simply have to be attached and given other assignments; but I think a project will be put up to Congress by the War Department on that subject.

Senator LENROOT. Does this 60,000 that you say would be available for actual work within the United States include all of the returned troops from Germany?

General LASSITER. Oh; yes, sir.

Senator LENROOT. Does that include also all the troops that would be returned from the Philippines?

General LASSITER. Yes; absolutely. It is a table made up on the assumption that everybody is back from Germany and that we have reduced the Philippine garrison to the minimum.

Senator HITCHCOCK. That is, 82,000 would remain for continental United States?

General LASSITER. Yes, sir.

Senator HITCHCOCK. Is that the number at the present time?

General LASSITER. No, sir; that is simply what we would have if we had 150,000 men.

Senator HITCHCOCK. So that we are actually far below that?

General LASSITER. We are below that now.

Senator HITCHCOCK. Below that at the present time by about 17,000?

General LASSITER. Of course, we have not made these modifications abroad yet—I mean in the Philippine garrison—and that has got to be slowly done as we get the money for movement of troops, etc.

Senator LENROOT. We are still short 17,000. General, we have 140,000 now, including the Philippine Scouts?

General LASSITER. Yes; another officer later on will discuss the question of the officers of the Regular Army, but I would like to point out one matter that I think is of interest with regard to the question of officers—I am concerned with matters of organization and of training. There are certain factors which are constant with regard to officers detailed away from service with troops. Those embrace, for example, all of the officers that are on duty with the various civilian elements of the Army, like the Reserve Officers' Training Corps, the National Guard, the Organized Reserves and many other activities which it is impossible for us to reduce very much further without getting rid of them entirely. Then, too, there are the disciplinary barracks and a number of nonmilitary duties which we have not been able to escape. While nonmilitary duties do not take a great many officers they do take some. With a total of 13,000 officers, about 6,500 would be on duties other than with troops of the Regular Army.

Now, there is also another drain which we can not escape and ought not to escape, namely, the officers who are on duty at schools, because we regard our school system as one of the most important things to carry on continuously during the slack times of peace, and that will be something like 2,600 officers as instructors and students, and probably more as we bring in more of the National Guard and more of the Organized Reserves for training; the total of 6,500 officers required for the duties I have mentioned have got to be deducted from whatever is the total strength of the officers.

Now, with further regard to any possible reduction of the Army, we must carry on a large summer training program of the National Guard, Reserves, R. O. T. C., and C. M. T. C. We would have to reduce the size of our organizations in order to maintain a reasonable number of organizations to perform the duties; reducing their size would result in a small reduction in the number of enlisted men in the companies, but it would not make a very large reduction in the

number of officers required for these units; and so in passing down to any lesser strength of the Army we would not greatly reduce our requirements for officers, because the number required is more or less a factor that will go on all the time. If we do greatly reduce the number of officers it simply means that we have got to take them away from the companies and, therefore, that the instruction will suffer in those companies and the number of officers will be, say, one per company when they should be more.

Senator LENROOT. Do you recall our pre-war strength, when 107,000 men comprised our enlisted strength and officers?

General LASSITER. Prior to 1916 we had an Army in round numbers of 100,000 enlisted men and 6,000 officers. The act of June 3, 1916, provided an Army of about 239,000, of which 175,000 were of the line. Under this act the authorized number of officers, including Philippine Scouts, was 11,737.

With regard to the National Guard, the chief of the Militia Bureau will go into that matter in considerable detail before you; therefore, I will not attempt to take that question up, as I know about what his testimony is, and I know that he is going to cover very fully what I might have said on that subject.

The next subject is the Organized Reserves. Here are some charts which you might be interested in seeing. They show the present status of the Organized Reserve in accordance with the provisions of the act of June 4, 1920.

Senator WADSWORTH. I think the charts should be inserted in the record.

(The charts are, in words and figures, as follows:)

Organized Reserves strength February 28, 1922.

[Source of information: Office of The Adjutant General.]

Corps area.	Divisional troops. ¹		Corps troops, commissioned.	Army troops, commissioned.	General headquarters reserve troops, commissioned.	Coast Artillery districts.		Total.		Unlocated, commissioned.	Unassigned, available for assignment.		Aggregate.	
	Commissioned.	Enlisted.				Commissioned.	Enlisted.	Commissioned.	Enlisted.		Commissioned.	Enlisted.	Commissioned.	Enlisted.
First.....	509	98	43			1		651			3,998	6	4,649	6
Second.....	1,078	32	301	535	172	94		2,780	82	433	5,517	15	8,730	97
Third.....	1,095		98	118	93	48		1,452			5,304	45	6,756	45
Fourth.....	1,374	3	146	112	18	47	2	1,697	5		3,204	6	4,901	11
Fifth.....	1,268	12	76	105	24			1,473	12	179	3,516	61	5,168	73
Sixth.....	762		58	171	82			1,073			4,852	14	5,925	14
Seventh.....	1,381		65	196	17			1,659			5,386	3	7,045	3
Eighth.....	1,021							1,021			3,698	28	4,719	29
Ninth.....	621		52	74	32			779			5,112	8	5,891	8
Total.....	9,709	97	894	1,354	438	190	2	12,585	99	612	40,587	187	53,784	286

¹ Includes Cavalry divisions.

Organized Reserve strength February 28, 1922—Continued.

INFANTRY DIVISIONS.

Corps area.	Division.	Commiss- sioned.	Enlisted.	Present commis- sion in per cent of war strength. ¹
First.....	Seventy-sixth.....	106		11.9
	Ninety-fourth.....	357		20.4
	Ninety-seventh.....	43		4.7
Second.....	Seventy-seventh.....	645	69	71.3
	Seventy-eighth.....	520	1	38.6
	Ninety-eighth.....	403	12	44.5
Third.....	Seventy-ninth.....	368		49.7
	Eightieth.....	461		52.9
	Ninety-ninth.....	149		16.5
Fourth.....	Eighty-first.....	342		37.8
	Eighty-second.....	588		63.0
	Eighty-seventh.....	444	3	48.1
Fifth.....	Eighty-third.....	264		28.2
	Eighty-fourth.....	466	12	51.5
	One hundredth.....	405		54.7
Sixth.....	Eighty-fifth.....	264		28.2
	Eighty-sixth.....	167		18.5
	One hundred and first.....	327		35.1
Seventh.....	Eighty-eighth.....	259		28.6
	Eighty-ninth.....	530		56.6
	One hundred and second.....	548		60.6
Eighth.....	Ninetieth.....	454		50.2
	Ninety-fifth.....	183		20.2
	One hundred and third.....	384		42.4
Ninth.....	Ninety-first.....	483		53.4
	Ninety-sixth.....	116		12.5
	One hundred and fourth.....	22		2.4
Total.....		9,400	97	

¹ War strength commissioned, 905 (512 line officers) officers.

CAVALRY DIVISION.

Corps area.	Division.	Commiss- sioned.	Present commis- sion in per cent of war strength. ¹
Second.....	Sixty-first.....	100	25.1
Third.....	Sixty-second.....	117	29.4
Fourth.....	Sixty-third ²		
Fifth.....	Sixty-fourth ³	44	11.1
Sixth.....	Sixty-fifth ⁴	4	1.0
Seventh.....	Sixty-sixth.....	44	11.1
Total.....		309	

¹ War strength commissioned, 396 (350 line) officers.² One brigade allotted Eighth Corps Area.³ One brigade allotted First Corps Area.⁴ One brigade allotted Ninth Corps Area.

Officers' Reserve Corps strength February 28, 1922.

[Source of information: Office of The Adjutant General.]

BY BRANCH AND GRADE.

	Major general.	Briga- dier general.	Colonel.	Lieu- tenant colonel.	Major.	Captain.	First lieu- tenant.	Second lieu- tenant.	Total.
General officers, line	2	41							4
Infantry			66	199	1,017	3,297	4,150	9,570	18,299
Air Service			9	20	148	591	1,243	6,076	8,067
Field Artillery			39	61	396	955	1,411	4,673	7,475
Quartermaster			24	114	700	1,518	1,366	3,062	6,784
Medical		16	94	438	1,961	2,509	944		5,962
Engineers			39	137	488	1,193	970	679	3,706
Dental				17	109	525	3,043		3,694
Ordnance		1	13	66	254	534	361	1,165	2,394
Coast Artillery			6	8	120	337	395	1,560	2,426
Signal		1	1	15	120	249	254	663	1,323
Cavalry			5	15	76	279	299	291	965
Chaplains					8	60	510		587
Medical administrative						149	167	215	531
Adjutant General			12	38	101	111	69	75	406
Veterinary					16	59	127	235	437
Chemical Warfare			1	10	43	101	81	123	359
Military Intelligence			1	11	85	126	71	42	336
Sanitary				6	33	79	82	65	265
Judge Advocate General			8	50	120	94	27		299
Finance		1	4	9	40	41	20	17	132
Staff specialist			5	14	22	17	4	5	67
Inspector General			1	12	17	4			34
General service						7	6	8	21
Military police					2	4	6	6	18
Total	2	60	328	1,240	5,816	12,848	15,606	28,750	64,650

BY GRADE.

	Num- ber.	Per cent of total.
Second lieutenant	28,750	44.5
First lieutenant	15,606	24.1
Captain	12,848	19.9
Major	5,816	9.0
Lieutenant colonel	1,240	1.9
Colonel	328	.5
Brigadier general	60	.1
Major general	2	
Total	64,650	100.0

THE ORGANIZED RESERVES.

1. In accordance with the provisions of section 3 of the act of June 4, 1920, the project laid down for the Organized Reserves by the War Department calls for the organization of 27 Infantry divisions, 6 Cavalry divisions, and sufficient corps, Army, and other troops to complete three field armies; to furnish certain units of three other field armies, composed primarily of troops of the Regular Army, and the National Guard, and to provide a majority of the companies of Coast Artillery needed by the coast fortifications upon mobilization.

2. The present plan contemplates the organization of these units in skeleton form with full war strength complements of reserve officers and sufficient enlisted reservists to insure the rapid assimilation and training of the additional personnel required in case of war.

The present status of the Organized Reserves project may be stated as follows:

(a) There have been prescribed 27 Infantry divisions and 6 Cavalry division areas, each comprising one or more States and covering the continental area of the United States.

(b) The work of locating and designating the subordinate units of these divisions, and of the nondivisional units, within the States has been practically completed by boards of officers, the majority of whose members in each case are reserve officers.

(c) Groups of officers of the Regular Army have established division headquarters and are now at work selecting and assigning to units the reserve officers living within the prescribed areas.

3. The work of organization is proceeding from the top down. First, the officers of the Regular Army establish the division headquarters and select reserve officers as commanding officers of regiments. These officers select battalion commanders and they in turn select the company officers. The company officers in turn obtain the enlisted men. The organization has now reached the state when recruiting of enlisted men has been begun. (See charts herewith.)

4. The units of the Organized Reserves have been distributed throughout the States as far as practicable with a view to offering citizens with military training the opportunity of joining a unit in the vicinity of their homes. Reports indicate popular acceptance of the project. It is estimated that approximately 58,000 reserve officers will be required for the prescribed units of the Organized Reserves. Additional officers will be necessary for other purposes upon mobilization, such as to bring the units of the Regular Army and National Guard up to war strength and to supply the needs of all other activities of the War Department, including troops for the communications zone and the zone of the interior. The initial goal which has been set in the procurement of reserve officers is 100,000. The strength of the Officers' Reserve Corps on March 1, 1922, was 64,650.

5. As contemplated by the law the commissioned and enlisted personnel of reserve units and other unassigned reserve officers will be trained for 15 days each year in such numbers as the sum appropriated for the purpose will permit. The number trained annually should be as great as possible as it is considered essential for the success of this undertaking that every reserve officer and enlisted man have a reasonable expectancy of active duty at least once every three years.

6. There has been no training of the reserves, that is in any way comparable to the mission of this force, since the demobilization of the war-time Army. The War Department feels that unless reserve officers and reserve enlisted men are made to feel that the Congress really intended that this civilian component of our military structure shall be in fact a dependable force in time of emergency the whole plan for organized national defense on a reasonable scale will fail. This next year is a critical year. Some training for the personnel and some concrete evidence of the realization of the importance of the reserves in the system of national defense is essential.

7. The House bill contains \$250,000 for the pay of reserve officers and \$100 for the pay of reserve enlisted men. These sums are entirely too small if we are to keep alive a reserve system and thus avoid the waste and ineffectiveness inherent in the policy of waiting until war comes to improvise an Army.

8. The original Budget submitted by the Secretary of War and the Director of the Budget included items for the pay of the reserves in specific amounts as follows:

Officers.....	\$3, 927, 902
Enlisted men	517, 465
Total	4, 445, 367

The original Budget was not, however, balanced in all items and careful study revealed the fact that other critical items, such as mileage, transportation and subsistence, were not in proportion to pay. There are other items of expense incident to the training of the reserves other than for pay alone. Officers must be transported to the place of training, enlisted men must be transported, clothed, and fed, and camps for the instruction must be established and maintained. The House bill is unsatisfactory in so far as the provisions made for the reserves are concerned. This unsatisfactory condition can not be corrected by increasing the pay items only. Corresponding amounts must be added in the other essential items of which mileage, transportation, subsistence, barracks and quarters, regular supplies, water and sewers, incidental expenses, and clothing and equipment are the most vital items.

9. The War Department urgently recommends that appropriations be made for training the Organized Reserves, as follows:

Pay:

- | | |
|---|----------|
| (a) 11 officers for a full year (1 brigadier general of the Medical Reserve Corps and 10 officers of the War Department General Staff, as required by section 3a, national defense act..... | \$50,000 |
| (b) 300 officers to attend courses of 3 months' duration at special service schools..... | 300,000 |

Reserve officers who volunteer should be given every opportunity to improve their military training. It will not be possible to send all reserve officers to the schools because of the expense involved and because many of them can not spare the time, but it is hoped ultimately to give at least one officer of each battalion unit the benefit of this instruction. There are approximately 2,000 battalion units allotted to the Organized Reserves.

- | | |
|---|---------|
| (c) 900 officers for duty at C. M. T. C. for 30 days to assist in the training of C. M. T. C. candidates..... | 234,000 |
|---|---------|

100 such officers were used during the past summer in the training camps for 10,000 men. The camps for this year contemplate training 30,000. It is the object of the War Department to tie in the C. M. T. C. with the project for the National Guard and the Organized Reserves and to make the camps one of the main sources of procurement for National Guard and reserve personnel. This can be accomplished to some extent by proper organization and by giving commanders of National Guard and reserve units opportunities to assist in recruiting for the camps. Duty at these camps is excellent training for the reserve officer as the recruit processing and the training of the candidates are closely comparable with conditions in war. As the period of training is longer than 15 days each officer called for duty with the camps must give his consent before being called.

- | | |
|---|-----------|
| (d) 20,000 officers for 15 days field training..... | 2,320,000 |
|---|-----------|

It is estimated that the total number of reserve officers on July 1, 1922, will be 70,000. With the amount estimated for pay, 1,200 will be given training for periods varying between 45 days and 3 months, and 19,100 will be trained for 15 days, making a total of 30 per cent to receive training next year.

Total for pay of officers.....	2,904,000
Pay of 10,000 enlisted men for 15 days.....	258,000
Total pay, officers and enlisted men.....	3,162,000
Mileage for reserve officers.....	1,047,000
Subsistence.....	87,500
Regular supplies.....	43,000
Clothing and equipage.....	175,000
Incidental expenses.....	21,248
Army transportation.....	300,000
Waters and sewers.....	10,000
Barracks and quarters.....	20,000
Grand total.....	4,845,748

10. The Chief of Finance will include in the amounts asked for for pay and mileage the above-indicated amounts. The detailed statement of needs for the other items will be presented by representatives of the Quartermaster General, as these amounts are included in the general appropriations for the corresponding purposes for the Regular Army.

11. I have summarized the whole budget for the summer training of the reserves in order to present a picture of what the cost will be. All of the above items are essential to the program. For any amount appropriated for pay corresponding amounts must be included in all other items.

Senator HITCHCOCK. You have not been commenting what the House did on these matters as you went along.

General LASSITER. The House only gave a total of \$250,000 for officers, and \$100 for enlisted men.

Senator SUTHERLAND. \$100?

General LASSITER. \$100.

Senator LENROOT. That is just to keep the appropriation alive.

Senator SPENCER. General, am I right in saying there are about 53,000 officers in the Reserves and about 286 enlisted men in the Reserves?

General LASSITER. The present strength of the Officers' Reserve Corps is 64,650 officers and 286 enlisted men. Of this number 53,784 are available to corps area commanders for assignment to units of the Organized Reserves. The remainder are held subject to assignment to special duties in time of war, other than assignment to tactical organizations.

The work of organization is proceeding from the top down. First, the officers of the Regular Army establish the division headquarters and select reserve officers as commanding officers of regiments. These officers select battalion commanders and they in turn select the company officers. The company officers in turn obtain the enlisted men. The organization has now reached the stage when recruiting of enlisted men has been begun.

Senator HITCHCOCK. You say the House appropriated \$250,000—

General LASSITER. Yes.

Senator HITCHCOCK. As against your request for how much?

General LASSITER. Our request is for a total of \$4,845,748, comprising \$2,904,000 for pay of officers, \$258,000 for pay of enlisted men, and \$1,683,748 for mileage, subsistence, supplies, transportation, etc., to balance the pay items.

I desire to emphasize again that for any amount appropriated for pay there must be corresponding appropriations for the other items just mentioned. The average amount required for mileage for each reserve officer called to active duty is \$50. For 20,000 officers mileage must therefore be appropriated to the amount of \$1,000,000.

Senator HITCHCOCK. What will be the effect of that cut?

General LASSITER. The total number of officers we would be able to train would be about 900 to 1,000.

Senator HITCHCOCK. As against what?

General LASSITER. As against all we want to train, which is a little over 20,000 altogether.

Senator LENROOT. How many are you training this year?

General LASSITER. This last year we had no funds for the training of reserve officers except a small amount, \$250,000. We trained about 900 last year for periods varying from 15 days to 3 months.

Senator HITCHCOCK. The House appropriation is to do this coming year just what we are doing this current year.

General LASSITER. In the current year; yes, sir.

Senator SUTHERLAND. How many went to your service schools?

General LASSITER. We have had about 70.

Senator WADSWORTH. Reserve officers?

General LASSITER. Reserve officers.

Senator WADSWORTH. We are not counting guard officers?

General LASSITER. Not counting what?

Senator WADSWORTH. Guard officers.

General LASSITER. No, sir; just reserve officers.

Senator SUTHERLAND. How many guard officers, approximately?

General RICKARD. I think it was something over 100; about 124 officers.

Senator LENROOT. General, where are you going to get the officers to train these 20,000 reserve officers?

General LASSITER. We are going to have in each one of the corps areas a camp for that purpose. There are a number of officers already on duty in each corps area with the reserves, and we are putting in more and more every day. Ultimately we hope to have altogether about 200 officers on duty in each of our nine corps areas on these classes of duties, instructing the civilian components of the Army. We will reinforce these officers with a number of the officers coming from the service schools. The schools finish in June; and then these officers from all the service schools will go to the camps where summer training of the civilian components of the Army is to be conducted and will do the training there. Now, that is the plan for this year. Next year I hope we will be able to train a good many of these officers with the Regular Army units, and, if possible, with the National Guard units.

Senator LENROOT. Is this training going on at the same time in all the corps areas?

General LASSITER. Practically at the same time.

Senator LENROOT. At the same time of the year?

General LASSITER. It varies slightly in different corps areas according to the climate.

Senator LENROOT. For a period of about 15 days?

General LASSITER. It is about 15 days.

Senator HITCHCOCK. Do you not think it is rather probable that you will fail to do efficient work with such a large program?

General LASSITER. I do not think so, sir; you see that gives each one of these corps areas about 2,000 reserve officers and 1,000 reserve enlisted men to train, and I think it could be handled.

Senator WADSWORTH. Gentlemen, did you visit the training camp at Camp Meade last summer, when a number of reserve officers came at their own expense, stayed 10 or 15 days, and paid all their own bills in order to get the training?

General LASSITER. I did not; I was at a camp myself; but I have heard the most favorable reports of it.

Senator WADSWORTH. I visited the camp myself, and I confess I was surprised. There were officers there from the grade of brigadier general down to and including the grade of second lieutenant reserve officers, all veterans of the war, and most of them came from the Third Corps Area. They paid their own mileage, paid their own mess bills, all of their expenses, and were studying hard and watching demonstrations all day, and in the evening listening to lectures; and from what they told me they were more than delighted with the experience; they wanted it every year, but it was a question of whether they could continue paying their own expenses.

General LASSITER. That is one of the difficulties; it is hard to ask the men to come to one camp, where they are paid; and, then, ask other men to go on a volunteer basis.

Senator WADSWORTH. General, we will be glad to hear you again in the morning at 10.30.

(Thereupon, at 5 o'clock p. m., the committee adjourned to 10.30 o'clock a. m., Saturday, April 15, 1922.)

WAR DEPARTMENT APPROPRIATION BILL, 1923.

SATURDAY, APRIL 15, 1922.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10.30 o'clock a. m.

Present: Senators Wadsworth (chairman), Jones of Washington, Sutherland, Spencer, Lenroot, Hitchcock, and Harris.

Maj. D. I. Sultan and Col. Frank J. Morrow appeared.

FURTHER STATEMENT OF BRIG. GEN. WILLIAM LASSITER, UNITED STATES ARMY, CHIEF OF OPERATIONS AND TRAINING DIVISION, GENERAL STAFF.

Senator WADSWORTH. General, you were testifying yesterday. Picking up where you left off, proceed in your own way.

General LASSITER. Going back to my testimony of yesterday, I summed up, at the end of what I had to say about the Organized Reserves, the specific changes that we asked for in the way of appropriations.

Senator SPENCER. I got that. That is where they had appropriated \$250,000 and \$100?

General LASSITER. Yes. I gave an itemized statement of what we regarded as necessary to carry on the training of the Organized Reserves.

Senator SPENCER. The total of that was what?

General LASSITER. The total for the pay of officers was \$2,904,000; for pay of enlisted men, \$258,000; making a total of \$3,162,000. Then the point was brought out that that is only for pay. That is all that the bill carries. The other items to balance that come out of the general appropriations for mileage, transportation, subsistence, clothing and equipment, incidental expenses, etc., and an itemized statement was given of what was necessary to balance that. The finance officer and the Quartermaster General will bring that out in detail when they are discussing the bill later.

Senator SPENCER. You gave the aggregate as how much?

General LASSITER. I gave the aggregate as \$4,845,748.

RESERVE OFFICERS' TRAINING CORPS.

The next item is the Reserve Officers' Training Corps and the Civilian Military Training Camps.

Senator WADSWORTH. What page?

Major BROWNE. That begins on page 9, sir.

General LASSITER. They constitute the principal feeders for our reserve system.

For the great National Army of approximately 2,000,000 men needed in the case of maximum emergency approximately 100,000 officers would be required.

Our present officer strength is as follows:

Regular Army	12,880
National Guard	7,551
Reserves	64,778
Total	85,209

Thus, it is seen that our present total number of officers does not meet our possible requirements. Furthermore, the great majority of our reserve officers are officers having had war experience, who will begin shortly to pass out, the great bulk of them passing out probably within the next few years. Hence, it is apparent how necessary it is to foster and develop methods to secure reserve officers to build the quota up again.

Our R. O. T. C. was reorganized in 1919, and is now on a healthy footing. Instruction is going on in 227 colleges and schools throughout the country, with a total enrollment of 95,942 students. Of these, 38,523 are in the junior division and 57,419 are in the senior division. Of the latter, there are 8,194 in the advanced courses. The proportion in the advanced courses of the senior division will increase year after year and, hence, the number becoming eligible as reserve officers each year will similarly increase. In 1921, 1,000 young men qualified as reserve officers; some 2,000 are expected to qualify this year; while for 1923 the product is expected to be about 4,000.

If the system is carefully fostered it is hoped that we may attain an average from the R. O. T. C. of at least 5,000 each year.

The summer camp training is an especially important feature in the development of the potential reserve officer. Due to the smallness of last year's appropriation, it has been necessary to regulate carefully the attendance at the camps this summer, curtailing the attendance of students who are in the first two years of their course. All young men in the high schools and military schools have been denied entrance to these camps because of the limited resources. This is very unfortunate in view of the necessity of giving these young men as much practical training as possible. Last year's appropriation amounted to \$2,896,553, which was required to cover not only the nine months' course at the colleges but also the summer camps; and, on account of the restrictions just mentioned above, it is possible to have only about 8,000 students in camp this summer. For 1923 it is especially desired to have at least 10,000 young men in camp.

The House bill as passed provides only \$2,750,000 for the next fiscal year. It contains the provision that uniforms and other equipment and matériel shall be furnished the R. O. T. C. from surplus stocks when said stocks are in excess of the actual requirements of the Regular Army. This provision permits the reduction of the original estimate of \$4,000,000 by \$377,000, which covers the cost of about 15,000 uniforms, this number of uniforms being the number

which the Quartermaster General estimates can be furnished from stocks on hand. Deducting this \$377,000 from the \$4,000,000, we have \$3,623,000 as the requirements for 1923. The House bill, however, appropriates only \$2,750,000, thus leaving a deficit of \$873,000.

Senator WADSWORTH. Does that take into account the furnishing from surplus or reserve stocks of other articles than uniforms?

General LASSITER. It includes only the uniforms.

Major MORROW. The act itself mentions uniforms particularly, but for the last two or three years we have been getting other surplus material, articles of a general nature, from the Quartermaster Department.

Senator SPENCER. The bill provides for the furnishing of uniforms and other equipment and matériel?

Major MORROW. Yes, sir, it does. We have been receiving that benefit for the last two years, and that is included in the estimate.

General LASSITER. Inasmuch as the requirements for the instruction at the colleges themselves require fixed amounts and must continue in any case unless the instruction is to be stopped, it appears that unless this deficit is made up it will be impracticable to conduct summer camps next year that would reach any but a very limited number of students. Therefore, it is urgently requested that the amount appropriated by the House of \$2,750,000 be increased by \$873,000, thus giving us a total R. O. T. C. appropriation of \$3,623,000.

Senator HARRIS. You want \$3,623,000?

General LASSITER. And I want to point out that that only permits us to train 10,000 young men in summer camps.

Senator SPENCER. How many do you say you will have this summer?

General LASSITER. Eight thousand. We could train a great many more, and a great many more expect to be trained and would like to be trained. They are already available and in the colleges.

Senator HARRIS. General, what work as valuable and important as that can be done at the same expense? Do you not get just about as good results from that for the expense as from anything you have done in the way of training officers?

General LASSITER. From these summer training camps? By all means. We regard that as our only practical way of developing reserve officers, and in order to do it they ought to have the experience in these summer camps.

CIVILIAN MILITARY TRAINING CAMPS.

The next subject is the civilian military training camps.

Major BROWNE. Page 12 of the bill.

General LASSITER. The objects of civilian military training camps, as stated in section 47d of the national defense act as amended are—

the military instruction and training with a view to their appointment as reserve officers and noncommissioned officers of such warrant officers, enlisted men, and civilians as may be selected upon their own application.

In addition to this primary object, the further purposes of these camps, as announced in War Department regulations, are—

to bring together young men of all types, both native and foreign born; to develop closer national and social unity; to teach the privileges, duties, and

responsibilities of American citizenship; to stimulate the interest of the youth of this country in the importance of military training, as a benefit to the individual taking such training and as an asset vital in the problem of national defense; to show the public by actual example that camp instruction of the kind contemplated will be to the liking of their sons, will develop them physically, mentally, and morally; to teach Americanism in its true sense, thus stimulating patriotism and self-discipline, resulting in greater national strength, both civil and military.

These camps and the R. O. T. C. are the main sources of supply for the reserve officers and noncommissioned officers that are necessary to carry into effect the intent of Congress as stated in the national defense act. The War Department proposes to recruit, organize, and train the candidates in C. M. T. camps so as to bring the camps into harmony with the project for the development of the Organized Reserves and of the National Guard, so that the personnel trained in the camps will graduate into the National Guard or the Reserves and be not lost.

For the camps held last summer, applications to attend the camps, complete in every respect, including physical examinations, were received from 40,679 young men of the country. In addition, 92,639 gave their names to the recruiting forces as being interested in the camps, but did not make formal applications, usually because of the impossibility of their being chosen to attend the camps. Thus a total of 133,338 men were interested and willing to attend the camps. Of this number 11,202 were authorized by the War Department to report to camp authorities; 10,681 actually reported, of which 422 were rejected for physical defects discovered after their arrival at the camps, and 286 were separated from the camps because of personal reasons making it necessary for them to return to their homes, or because of absence without leave, misconduct, or inaptitude. A total of 9,973 completed the course.

The success of the camps held in 1921 has been evidenced in many ways. Perhaps the best indication of this success and the general sentiment in favor of them throughout the country are the letters received from the governors of 38 States. The outstanding features of these replies were the enthusiasm shown by the different governors as to the results obtained by the camps, and the desire for an expansion of the camps for the future and their retention as a permanent feature of Army work. I have here a summary of the replies.

Senator HITCHCOCK. Do your figures show how many States were represented at these camps, General?

General LASSITER. All of the States.

NUMBER OF TRAINING CAMPS.

Senator WADSWORTH. How many camps were there last year?

General LASSITER. There were 12.

Senator WADSWORTH. One in each corps area?

General LASSITER. Yes; and in some cases we had to have two, due to the size of the areas.

Senator WADSWORTH. How long did the camps last?

General LASSITER. Thirty days.

Senator WADSWORTH. What were the age limits?

General LASSITER. The age limits were 16 to 35.

Senator WADSWORTH. Do you contemplate reducing the maximum age?

General LASSITER. The limits we have given this year were 17 to 27, unless a man had had service in the World War, or prior service of some kind, when we would accept him up to 35 years of age.

Senator WADSWORTH. At what age do you think you get the best results?

General LASSITER. I think at the ages of 17, 18, and 19.

Senator WADSWORTH. Have you any reports as to the improvement in physical condition?

General LASSITER. Yes; we had, from some of the camps, very detailed reports on that subject. I was at a camp where one of these civilian military camps went on, and, as I recall, with a total of about thirteen or fourteen hundred students, the total gain in weight aggregated about two tons.

MEDICAL ATTENTION TO TRAINEES.

Senator WADSWORTH. Do you give them any medical attention in order to improve their condition permanently while they are at the camps, such as care of the teeth, and so on?

General LASSITER. They are all carefully examined the first two days of arrival, and then steps are taken to do what we can to improve their physical condition while they are there. A card is made out for each boy, showing what his particular needs are, and both physically and in other ways attention is given to the defects which have been discovered.

Senator WADSWORTH. Is advice given to him as to what he may well do after he leaves the camp to continue the improvement of his physical condition?

General LASSITER. The medical officers in their talk to the young men explained the situation to them. At most of the camps letters were written to the parents of these men informing them of the minor physical defects that had been discovered and further advising them as to the proper action that should be taken to remedy the situation.

Senator HARRIS. General, how many applications did you have for these places last year?

General LASSITER. We received applications, complete in every way, from 40,679. In addition, 92,659 made inquiry about the camps.

Senator HARRIS. And how many served?

General LASSITER. Actually, 10,681 reported, and 9,973 finished.

Senator HARRIS. Were those men selected according to the population of the States?

General LASSITER. They were distributed throughout the States. Each community in every State sent a quota.

Senator HARRIS. But what I am trying to get at is, did you give each State its relative number according to its population?

Major SULTAN. Theoretically, we did. Practically, on account of the saving of transportation, in some cases, those quotas had to be modified slightly. When one State was far removed from a camp, the number had to be decreased in order to keep from overrunning the allotment for transportation.

Senator HARRIS. It seems to me that a State should not be discriminated against because a camp happened not to be located near its

borders, and that they ought to be selected according to the population as compared with the number appointed.

Major SULTAN. We had planned to do that last year, but we did not get quite as much money as we had expected, and we had to make some modifications. This year we have made the same rule—that they will be accepted according to population for each county and each State. Whether we can adhere to that or not will depend upon the amount of money we can get for the camps.

Senator HARRIS. Will you be kind enough to put in the record the number from each State that attended these schools last year, and the number of applications?

Major SULTAN. I will.

The number attending from each State is indicated in the following table:

First Corps Area:		Sixth Corps Area:	
Maine.....	135	Illinois.....	690
New Hampshire.....	78	Wisconsin.....	131
Vermont.....	59	Michigan.....	322
Massachusetts.....	673		
Rhode Island.....	67	Total.....	1,143
Connecticut.....	156		
Total.....	1,168	Seventh Corps Area:	
Second Corps Area:		Minnesota.....	132
New York.....	609	North Dakota.....	34
New Jersey.....	189	South Dakota.....	49
Delaware.....	13	Iowa.....	255
Pennsylvania.....	2	Nebraska.....	99
Canada.....	1	Missouri.....	266
Total.....	814	Kansas.....	92
		Arkansas.....	196
Third Corps Area:		Total.....	1,123
Pennsylvania.....	848	Eighth Corps Area:	
Virginia.....	225	Colorado.....	216
Maryland.....	175	Arizona.....	41
District of Columbia.....	98	New Mexico.....	51
Total.....	1,346	Oklahoma.....	114
Fourth Corps Area:		Texas.....	612
Alabama.....	136	Nebraska.....	1
Georgia.....	237	New York.....	5
Florida.....	75	Ohio.....	4
Louisiana.....	99	Iowa.....	1
Mississippi.....	83	Massachusetts.....	1
North Carolina.....	155	Montana.....	1
South Carolina.....	119	Pennsylvania.....	1
Tennessee.....	179	Michigan.....	1
Total.....	1,083	Missouri.....	4
Fifth Corps Area:		Kansas.....	1
Indiana.....	343	Total.....	1,054
Ohio.....	694	Ninth Corps Area:	
Kentucky.....	230	Montana.....	88
West Virginia.....	93	Oregon.....	41
Total.....	1,300	Idaho.....	62
		Washington.....	262
		California.....	462
		Wyoming.....	73
		Nevada.....	55
		Utah.....	114
		Total.....	1,157

Senator HITCHCOCK. Let me ask one question, General. Last year you had \$900,000 for this purpose?

General LASSITER. I was coming down to explain that part of the matter.

Senator SPENCER. Proceed.

General LASSITER. The success of the camps held in 1921 has been evidenced in many ways. On that subject, I want to refer to these letters which we have received from the governors of the States, and which I will put into the record.

(The letters referred to are as follows:)

RÉSUMÉ OF REPLIES FROM GOVERNORS.

1. In answer to the letter sent by the Secretary of War to the governors of the States, dated September 21, 1921, and asking for the opinions of the governors as to the citizens' military training camps which were held throughout the country, replies were received from the governors of 38 States. Those States not replying to date are as follows:

Michigan, Montana, Nebraska, Wyoming, New Mexico, New York, North Carolina, Ohio, Tennessee, Wisconsin.

2. The outstanding features of the replies were the enthusiasm shown by the different governors as to the results obtained by the camps; the desire for an expansion of the camps for the future, recommending at the same time, that the camps be made a permanent feature of the Army work; and the cooperation that may be obtained for the National Guard through the camps.

3. The governors of all of the States with the exception of North Dakota were enthusiastic in their praise of the camps, many stating that there had been a definite, worth-while gain in the physique and health of the young men who attended the camps. The ex-governor of North Dakota, Mr. Lynn J. Frazier, stated that there was no doubt as to the good accomplished by the camps for the men physically, but that he, personally, was opposed to anything that savored of military drill or instruction.

4. Many of the governors felt that the citizens' military training camps should go on in the future. In this connection, many of them state that they believe the camps should be enlarged and that a larger appropriation should be made for them in the future. Those advocating permanency of the camps, with increased appropriation, were the following:

Alabama, Utah, Oklahoma, Maryland, California, Rhode Island, Maine, Georgia, Louisiana, West Virginia, New Jersey, Delaware, Massachusetts, and Kentucky.

5. In addition to the foregoing, the governors of the following States advocate that the camps be made a permanent institution:

Vermont, Connecticut, South Dakota, Missouri, Arkansas, Florida, South Carolina, Idaho, Oregon, Pennsylvania, Colorado, Indiana, Mississippi, Washington, Nevada, Virginia.

6. Eleven of the governors saw an opportunity to join the citizens' military training camps with the National Guard of their States and recommended that greater efforts be made along this line. Their opinions were diversified, ranging from that of the governor who had a National Guard unit in training at the same camp where the C. M. T. C. was held, and who has since that time made an effort to enroll some of the young men of the latter in the former, to the exceptionally constructive suggestions made by the Governor of New Jersey, which were accompanied by an exhibit of the work which was accomplished by the adjutant general of that State, on behalf of the National Guard. The following States desire that means of cooperation be established between the C. M. T. C. and the National Guard of their States:

Illinois, Maryland, Louisiana, Texas, California, Kansas, New Jersey, Pennsylvania, Massachusetts, Virginia, Rhode Island.

7. In addition to his other suggestions, the Governor of Virginia makes a strong plea for compulsory military training of all citizens, and adds several methods which he believes could be followed with success.

8. The Governor of New Jersey calls attention to the age limits that were fixed for the 1921 camps, and gives as his opinion that 16 years is too young for a boy to be taken into one of the C. M. T. C.'s.

9. The work at Camp Devens in the First Corps Area, was found to be too hard for the young men from Maine, according to the governor. In this connection it is worthy of note that the schedule at the camp was modified materially after the medical officers had stated that the work was too hard for the young men in attendance.

10. The following are some of the opinions expressed by the different governors:

Edwin P. Morrow, Kentucky: "From every section of the State, from the boys, from their parents, from the local press, etc., I have received nothing but the highest praise expressed in the most enthusiastic terms."

Lee M. Russell, Mississippi: "Replying to your letter of September 21 in re citizens' military training camp held at Camp Jackson this summer, beg to advise that we are highly elated over the results."

Louis F. Hart, Washington: "I think that the citizens' military training camp held at Camp Lewis this summer was a wonderful success and particularly so with regard to the wonderful advantage given to the State of Washington."

Warren T. McCray, Indiana: "I feel that such training camps will have a most beneficial effect in keeping our men in physical training and promoting the cause of patriotism."

Albert O. Brown, New Hampshire: "I believe that the young men in attendance there—Camp Devens—were very much benefited both by the wholesome discipline enforced and by the splendid physical training, and that the influence for good of the camp will be extended by the return of these men to their several communities."

J. B. A. Robertson, Oklahoma: "I have heard only creditable reports of the splendid work done in the training camp at Travis. The only criticism that I have to offer is that so many were called and so few chosen; owing to the shortage of finance so many were eliminated that much disappointment was expressed on that account."

Pat M. Neff, Texas: "On several occasions I have had the pleasure of visiting this camp—Camp Travis—where a large number of our men were being trained, and was impressed by the splendid conduct of these young Texans and the excellent training they were getting, which seemed most conducive to a spirit of reverence for law and order, a desire for right living and a love of country."

Everett J. Lake, Connecticut: "I sincerely hope that conditions will permit the continuation of the camps each summer on account of their great potential value, in establishing a closer intimacy between the Army and the public, and in setting and maintaining a high standard of health and manhood and public service in each succeeding generation."

Emery J. San Souci, Rhode Island: "I was very much impressed by the spirit of the camp—Devens—and the earnest endeavors that were made to interest and instruct these young men in preparation for future emergency. I trust that the work of these camps will be continued in the future, and I am sure there will be much greater interest in them next year."

Percival P. Baxter, Maine: "I believe that the young men who were at this camp—Devens—were receiving excellent training, that they were being taught good citizenship, and that they were well taken care of physically. The officers in charge of the camp seemed to me to be taking a real interest in their work and the military feature was not made too prominent."

J. A. O. Preus, Minnesota: "I have heard nothing but praise of the citizens' military training camp held at Fort Snelling, and I have not suggestions to make regarding improvements."

Thomas C. McRae, Arkansas: "I want to unqualifiedly commend this newly instituted agency for training our youthful soldier citizenry."

John M. Parker, Louisiana: "It is probably unnecessary for me to state that I heartily approve of the proposition; that it is practicable goes without saying. It is desirable from an athletic standpoint, and a splendid method of acquiring disciplinary habits, thereby improving the physical and mental qualities of our young men."

E. F. Morgan, West Virginia: "I am of the opinion that these camps will have a permanent influence upon the character of those who are fortunate enough to secure admission."

Henry J. Allen, Kansas: "From those of Kansas who attended, I gained the most encouraging reports of the worth of the enterprise. I find that the period of training has been taken seriously by them as an exceptional opportunity, and they have come back home with many valuable lessons which have not

only strengthened them as effective civilians, but have given them a new intelligence touching the possibility of the national defense."

Edward I. Edwards, New Jersey: "They (the young men of New Jersey) attained during the month's training an unusually high standard of discipline and efficiency and returned to their homes stronger physically and mentally, better citizens, and with a wholesome respect for lawful and constituted authority. The data and information to further advance the movement which have been furnished me warrant, after careful consideration, the following recommendations:

"(a) Federal appropriation for the training of 50,000 young men in 1922.

"(b) The minimum and maximum ages to be 17 to 26 years; each candidate to be eligible must have passed his seventeenth birthday."

N. E. Kendall, Iowa: "Iowa sent 384 boys to the camp, selected from approximately 1,200 applicants, and all returned better physically, better mentally, and better in every respect. They have not only acquired increased love of country and augmented respect for law and order, but they have become imbued with the spirit of service and recognize the necessity for national defense to the extent that I expect them largely to enroll in the National Guard."

D. W. Davis, Idaho: "The appearance of the young men, their enthusiasm for the course of training, their habits of industry, the mental keenness they display, and the satisfaction of their parents and friends make me feel that I would be unmindful of a responsibility if I were not to commend you, as the head of the department, and the officers under you, for the splendid efficiency displayed at this camp (Lewis)."

Ben W. Olcott, Oregon: "It gives me the greatest pleasure to express my approval of the results already obtained by the citizens' military training camp, held at Camp Lewis this summer, and if other camps this year have been as successful the movement is one deserving the warmest commendation."

William C. Sproul, Pennsylvania: "I congratulate the War Department upon the satisfactory management of these camps and the good results which are already apparent in Pennsylvania."

Channing H. Cox, Massachusetts: "I believe that if sufficient money were made available that 10,000 New England young men would be glad to go to camp next year. In my judgment it would be a splendid thing."

Oliver H. Shoup, Colorado: "The experience which we have had at Fort Logan strengthens the desire of the people of Colorado to continue these annual encampments until their great benefit may have been received by all of the young men of the Nation who are fit to receive them."

W. H. McMaster, South Dakota: "I have observed a number of the men who attended the camp and am confident that they were variously benefited thereby."

Thomas W. Hardwick, Georgia: "I have heard nothing but praise from our young men who attended this camp (Jackson) for the splendid manner in which it was conducted, and I have the very highest opinion of the useful service rendered by it. I earnestly hope that the work may be continued and enlarged in the future."

Albert C. Ritchie, Maryland: "As the training of the young men of the country is such an important part of our present military policy, I trust ample funds will be made available for the coming year in order that the scope may be extended and broadened, to the end that all young men who are willing to avail themselves of this training may prepare for the defense of the Nation and be added to our reserve force."

Charles R. Mabey, Utah: "In talking with a number of them (the young men who attended the camp at the Presidio of San Francisco) on their return I learned that they were enthusiastic in their praise of the instruction and benefit derived. The only suggestion I would care to make at the present time is that facilities at future camps be increased to take care of a greater number."

R. A. Cooper, South Carolina: "It was not my privilege to make any personal observation of the operations of this camp. I can state, however, that the idea appeals to me. I think this is an economical and efficacious way to train a body of men for use in time of emergency. It does not take them out of productive industry, and yet it gives to them the rudiments of military knowledge."

Westmoreland Davis, Virginia: "I have been wondering if it would not be a wiser policy on the part of the Government to require all of our young men of military age to attend for a specified period an accredited military school or college or serve an enlistment in the Army, Navy, or Marine Corps or enlist for at least one year in the National Guard, so that all could get the benefits of the training, rather than to develop a separate and expensive system under which

only a comparatively few of our young men can receive military training. In the absence of a broader policy, however, I feel that the citizens' military training camp idea is to be commended and should be developed as far as the finances of the Government will permit."

James Hartness, Vermont: "In reply to your letter of the 21st ultimo, it gives me great pleasure to heartily recommend the citizens' military training camp at Camp Devens."

Arthur M. Hyde, Missouri: "I heartily agree with you that these camps can be made of great value to the country, but as I have not received the itinerary, nor the reports of the camp, I am not in a position to offer any suggestions."

Emmet D. Boyle, Nevada: "I am advised that the citizens' military training camp held at the Presidio, San Francisco, this summer was productive of good results in every particular. I am not qualified to make suggestions regarding the details of the school. I am prepared, however, to express the hope that these schools will be continued."

Len Small, Illinois: "The information that comes to me clearly indicates that the camp was a success and that the officers connected with it entered into the work with enthusiasm and industry. I was particularly pleased with that portion of the War Department program which suggested cooperation of those in charge of the citizens' military training camp with the National Guard of the various States. This cooperation should result in directing the attention of the citizens who receive training to the advantage of enlistment with the National Guard."

William D. Denney, Delaware: "Referring to your communication with reference to the citizens' military training camp at Plattsburg, desire to say that speaking from my own experience as a member of the 1915 camp, together with the reports of the young men from this State attending last summer's camp, I am confident the camp was a great success. The boys were enthusiastic and showed a fine spirit of determination to secure the highest possible benefit from their training. It is an admirable national policy to operate these camps for all sections of the country in order to give this valuable course of training to as many young men as possible, who shall be a reserve of available material for officers' commissions in the event of war."

Cary A. Hardee, Florida: "The young men who were fortunate enough to attend the camp from Florida have returned very much pleased indeed with the activities at the camp. It has been a splendid advance, both from a physical as well as a military standpoint, and I feel that the institution of these military training camps over the country is serving a very useful purpose. I wish to commend the War Department for its initiative in this regard."

William D. Stephens, California: "I have spoken to several of the graduates of the training camp, as a large number of them enlisted in the National Guard after completion of the camp, and I know that their month's training made them of greater value to their employer and better citizens generally. If possible, these camps should be prepared so that the entire youth of each State could attend them. With the opportunity offered them of finishing their military training by enlisting in the National Guard for a period of three years, we would have what the Secretary of War states, a body of trained men ready to respond to the call of the Nation, and the existence of such a body would go a long way toward protecting our Nation from the horrors of war as well as having a splendid effect upon the morale of the State."

Thomas E. Campbell, Arizona: "I have written to all of these young men and also to those who attended the citizens' military training camp held at Fort Logan, Colo., requesting from them an expression as to the benefits derived at these encampments and also asking them to make any suggestions that they deemed appropriate."

"Twenty-six young men from Arizona attended the Camp Travis encampment, and of this number I have received replies from 11. Eleven Arizona boys attended the camp at Fort Logan, Colo., and I have heard from 9 of them. Thus, the replies I have received represent the opinions of 20 of the 37 young men from this State who attended these encampments, and will, I believe, furnish a fair cross-section of their opinions concerning the benefits derived by them. In order that you may have this information before you, I am transmitting herewith the original letters received by me from these young men."

"As to my own views on these encampments, which are necessarily based upon the inclosed replies, will state that I believe that these encampments proved a great benefit not only to the individuals who attended them but also

had a marked effect in the dissemination of higher ideals of citizenship and patriotism which will be of untold value in the future."

Thomas E. Kilby, Alabama: "Indirectly, we are informed that these young men are very enthusiastic in their reports of the work at the camp and that the parents who have observed the effect on these young men have been heartily in their praise. It might be of interest to you to know that while this State was allotted 104 places last year, there were about 400 applicants, and no doubt next year the number of applicants will be more than double, and we believe that Congress should be urged to make proper appropriations to carry on this work for the reasons, if no other, than those mentioned in the second paragraph of the letter of Secretary Weeks."

General LASSITER. The appropriation for the fiscal year ending June 30, 1922, was \$900,000. The cost of last year's camps chargeable against the special appropriation for the camps was \$82.64 per man for subsistence, clothing, and transportation of candidates.

The President of the United States has stated in an official announcement that he wants to see 100,000 young men trained in these camps annually. The estimates for the fiscal year 1923 include an item of \$2,700,000 which will permit the training of 30,000 young men.

It is requested, however, that the wording of the item as it appears in the House bill be changed as follows:

Strike out line 24, page 12, and substitute the following therefor: "5 cents per mile as prescribed in said section 47d; for such expenditures as are authorized by said section 47d as may be necessary for the establishment and maintenance of said camps, \$2,700,000."

Strike out the words "or reserve," on line 5, page 13.

Senator SPENCER. Where are those words "or reserve"?

General LASSITER. On line 1, page 13.

The addition of the words "for such expenditures as are authorized by said section 47d and may be necessary for the establishment and maintenance of said camps" makes it possible for the special appropriation to be charged with the expense incident to recruiting for the camps, including additional clerical help, with the cost of printing blank forms and informative literature, with the cost of preparing and serving the food, including the hire of civilian cooks and scavengers, with the maintenance of target ranges and shooting galleries, and with the incidental expenses necessary to the successful operation of the camps. It is the desire of the War Department that this appropriation be made, to a large extent, self-supporting. To make the general appropriations bear all the expense incident to the camps, except for transportation and subsistence of students, is wrong in principle; and, furthermore, the drastic reductions that have been made by the War Department in general appropriations, Quartermaster Corps, have made them inadequate to meet the drain if they must bear this burden for 30,000 C. M. T. C. students. This change in wording is necessary no matter what the amount carried in the appropriation for C. M. T. C.'s may be. The inclusion of the words "or reserve," on line 5, page 13, will require the War Department to issue some clothing from reserve stock without replacement. The undesirability of this action will be explained to the committee by the Quartermaster General.

The War Department feels that the C. M. T. C. movement, which is a continuation of the Plattsburg idea, has the support of the country, and that the time has been reached when an appreciable number of

men must be trained. The War Department urgently recommends that 30,000 men be trained next summer, and that the \$2,700,000 necessary for this purpose be appropriated.

RECRUITING OF TRAINEES.

Senator LENROOT. How much do you estimate for the recruiting?

General LASSITER. For the cost of recruiting?

Senator LENROOT. Yes.

Major SULTAN. Nothing except for the informative literature and the blank forms and the clerical help necessary to reply to the some million or so communications that result from this recruiting campaign. There is no extensive advertising or expenditures of that kind.

Senator HITCHCOCK. How do the young men of the country get knowledge of these camps?

General LASSITER. We have various ways of doing that. Each corps area commander is required to spread this information throughout his corps area by all the agencies at his disposal. We expect to use the Organized Reserves and the National Guard units, and to call upon them to designate certain men that they want from their particular districts as eligible and good men. We spread it through all of the civil agencies that are available, such as the post offices and county authorities. Our idea this year is to try to get each county represented by its quota of people who will come to camp and then be consolidated with other units, so that every civilian agency as well as every military agency that we can find is used to spread this information, and then they get the total list and from that make their final designations.

Senator HITCHCOCK. The thing in brief is that last year you cared for something over 10,000 at these camps. This year the House has appropriated enough to make it 20,000, and you want to raise it so as to make it 30,000?

General LASSITER. Thirty thousand.

NUMBER OF APPLICANTS LAST YEAR.

Senator JONES of Washington. How many applications did you have last year?

General LASSITER. We had a total of 40,679 complete applications. In addition there were 92,659 who gave their names to the recruiting force as being interested in the camps.

METHOD OF SELECTING TRAINEES.

Senator JONES of Washington. Now, did you determine the 10,000 that you had? How did you select the 10,000 out of those 40,000 applications?

General LASSITER. That was done in each case by the corps area commanders, generally by priority of application.

Senator JONES of Washington. First come, first served?

General LASSITER. That was the general way in which it occurred. A good many disagreeable things happened last year, because we had hoped to train more than the funds permitted us to train, and a great many had applied to come, and they thought they

could come, and then we had to cut down the allowance, so that a number of people who had expected to come were not permitted to come. That created some discontent.

Senator JONES of Washington. States or counties that were farther away from the camps had a smaller quota?

General LASSITER. You see, ample time was given to put in these applications. They had to be in by a certain date, and then the selections were made from those.

Senator JONES of Washington. I understood a while ago that you had a smaller quota from a long distance away because of the expense. That is what I want to get at. Was a smaller quota assigned to the counties and States farthest distant from the camps?

General LASSITER. No. You perhaps heard what I said in regard to the Reserve Officers' Training Corps along that line. Were you referring, when you spoke, to something that I said about 10 minutes ago?

Senator JONES of Washington. I thought so.

General LASSITER. That was with regard to the Reserve Officers' Training Corps.

Senator JONES of Washington. Let us come back to that, then.

Senator SPENCER. I thought the colonel said that in some cases they found that the allotment had to be reduced because of the cost of transportation; that if the full allotment had been made it would have carried them beyond the amount that was available. I understood him to say that.

Major SULTAN. That was true in the larger corps areas, especially on the Pacific coast.

Senator JONES of Washington. You got 10,000 out of 40,000?

General LASSITER. Yes.

Senator JONES of Washington. Did you give the same number to a State farthest away that you did to a State close to camp?

Major SULTAN. No, sir.

Senator JONES of Washington. That is what I wanted to know. Because a State happened to be farther away it got a smaller quota.

Senator HARRIS. Do you happen to have with you the information as to how many there were from each State?

Major SULTAN. No, sir; I have not.

General LASSITER. But we can make you up a complete list as to just how they were sent in.

Senator SPENCER. General, would it be convenient to furnish a statement of the applications from each State, as well as the number from each State?

Major SULTAN. We can not give you that information for the entire United States, sir. This was all handled in the corps areas, and the complete information was not always furnished the War Department.

Senator HARRIS. General, you said, as I understood, that you got the best results from the ages of 17 and 18?

General LASSITER. Seventeen, eighteen, and nineteen. It seems to me that those are the young men that we want to reach in this. At that age they would be ready to go right into the reserve system.

Senator HARRIS. It would seem to me that you would select those men, in preference to basing your selection on the first letters that were received. It seems to me the Government should make its selec-

tion. The mere fact that one man happened to write one day ahead of another is no reason why he should be given a preference over a man from whom you think you could get better results.

General LASSITER. But then, of course, we want to make this thing reach as many people as possible, and we do not want to close the door to a man who feels that he does want to go in.

Senator HARRIS. But if you can not make it reach all, the point I was trying to make was that you ought to select the ones from whom you would get the best results rather than those who made application first.

General LASSITER. I think by far the great bulk of the applications have come from these younger men. Last year the percentage, who were over 20, was measurably small. The great majority of those that I had at my camp were 16 and 17.

Senator JONES of Washington. Do you confine this priority in the order in which applications are received to those from a particular State, or do you just apply it generally to those who make application first and take them?

General LASSITER. This year it is put up to the corps areas commanders, and the applications are to be in by a certain date. What date did we fix for that?

Major SULTAN. April 1 to June 1. April and May are the recruiting months.

General LASSITER. And June 1 was the closing date of these applications.

Senator JONES of Washington. Where was your camp out in the Northwest, on the Pacific coast?

General LASSITER. At Camp Lewis.

Senator JONES of Washington. And that covered how many States?

General LASSITER. The camps in the Ninth Corps Area were at Camp Lewis and the Presidio of San Francisco, Calif. Men went to the camp nearest their home.

Senator JONES of Washington. This is what I want to get at, General: Suppose that you got a thousand letters from people in Tacoma, right adjoining Camp Lewis, just a day after the notice. Would you give all of those priority over applications coming in from Portland, or from Boise, Idaho, a couple of days away?

General LASSITER. They have plenty of time this year in which to put in all these letters. Of course, we can not give them any definite statement yet.

Senator JONES of Washington. But you stated a while ago that you selected them in the order of their applications. If you follow that course this year, will you give all the people of Tacoma that advantage, for instance? I am not saying that I do not want you to do it, but it does not seem to me that that is exactly the right principle to follow, because the people of Tacoma can get their applications in immediately, and they would all get in ahead because of their location.

General LASSITER. You mean, the mail service being shorter, if they started on the 1st of April, they would all get in?

Senator JONES of Washington. Why, yes; they would be in by the night or the afternoon of the first day.

General LASSITER. Major Sultan, have we made any modifications in those instructions?

Major SULTAN. Just let me read this paragraph from the instructions sent out by the War Department:

The recruiting period will last two months, beginning April 1. As many candidates as so desire may apply during that period, special effort being made to fill the quotas assigned to each territorial area.

We told them not only to assign quotas to States but to assign quotas to smaller subdivisions. Some of them allot quotas by congressional districts, some by counties; but they must assign them to territorial areas in each State according to population.

In each territorial area within the corps area, candidates who are qualified will be accepted up to the assigned quota according to priority of application.

Senator SPENCER. That covers your point.

Major SULTAN. If a particular corps area decides to make it by congressional districts, they would accept up to the quota from that congressional district according to priority of application.

Senator JONES of Washington. Suppose you assign it to a State, and you have a thousand from one State, and a thousand applications come in from the immediately adjoining city of Tacoma; you give them all to Tacoma, do you?

Major SULTAN. We have not indicated to corps commanders that they would make such a large territorial assignment as to a State. We want them to go lower than that. We do not prescribe all details, but we have left it to their discretion, announcing the general principle that they will split the corps area up into territorial areas, and then allot a quota to each territorial area, and accept from that area according to priority.

Senator JONES of Washington. I understood the general to say a while ago, when he was asked about allotments to States and counties, and so on, that they were admitted according to priority of application.

Major SULTAN. Yes, sir.

Senator JONES of Washington. Without saying that there was an allotment to each county or State.

General LASSITER. I did not bring out that point, it is true.

Major SULTAN. I read you the verbatim instructions that the War Department has issued on the subject.

Senator WADSWORTH. Is there anything else of interest in that paragraph of instructions?

Major SULTAN (reading):

It will be mandatory that all accepted candidates have the regular typhoid and paratyphoid prophylaxis and vaccination against smallpox given before arrival at camp.

That happens to be all that is included in the particular paragraph from which I was reading.

Senator WADSWORTH. Those candidates have that done at their own expense, do they?

Major SULTAN. We have done everything we could to get it done without expense to the candidate. He can go to any Army post and get it done without any charge whatever. The War Department furnishes the typhoid vaccine. We have arranged so that he can go to any official of the Bureau of Public Health or State public health bureau or any naval medical officer or National Guard or reserve medi-

cal officer. Our civilian assistants have enlisted the services of a great many civilian doctors with no official affiliations of any kind, and they give it free; so that it is a rare case when it costs a boy anything to get the inoculation vaccination and physical examination.

Senator WADSWORTH. Your civilian assistants are the Military Training Camps Association?

Major SULTAN. I have reference especially to the Military Training Camps Association of the United States, with headquarters in New York.

Senator JONES of Washington. How do you bring these facilities to the attention of the applicant?

Major SULTAN. All of our informative literature contains this information, sir.

Senator SPENCER. Do you not find that the press generally regard that as news and circulate it?

Major SULTAN. We have to make a news item out of it, sir. We have to find something new each time, and emphasize that feature; but the press has been very nice about it, and has given us a great deal of publicity.

General LASSITER. There is a great deal of advertising literature sent out.

DETAILS OF EXPENDITURES.

Senator LENROOT. Did you put in the House hearings the detail of the expenditure of the \$900,000 you had this year?

Major SULTAN. Yes, sir.

Senator LENROOT. It is to be found in the House hearings?

Major SULTAN. Yes, sir.

Senator LENROOT. There is no obligation, as I understand, on the part of those who take this training different from the obligation of any other citizen?

General LASSITER. No; none other.

Senator LENROOT. You received last year four times as many applications as you could fill. Do you think applications will continue to increase in that proportion?

General LASSITER. The indications are that we can get all that we can possibly take care of.

Senator LENROOT. Now, I want to ask you for your opinion as to whether you could get enough applications with such an appropriation as you are likely to get if the conditions were that they should become part of the enlisted reserve?

General LASSITER. That is not a question that we thought it desirable to put up yet, until the people of the country have been a little more educated to it.

Senator LENROOT. I understood that that was the theory in the beginning; but in view of your getting four times as many applications as you could take care of, are you prepared now to express any opinion on that point?

General LASSITER. I have talked a good deal on this subject with representatives of the Military Training Camps Association of the United States, and they thought that this year was a little early to begin anything of that kind; but in our attempt to make up the quotas this year we were considering letting every divisional area of

the Organized Reserves bring in such a quota with the idea that they would feel themselves identified with the troops that came from that divisional area, and that this feeling would go down into the smaller units of each regimental area and each battalion area. I have here maps showing exactly how for any given district, for example, the State is divided up, for the units of the Organized Reserves. The boys would come from certain regimental areas to this camp with the idea that they would know that in that area came not only certain units of the Organized Reserves but certain units of the National Guard, and if they wished to become identified with those they had the opportunity, because they are told now that those are the units that come from their particular district. Later on, I think these camps will be an especially important element for the National Guard; that we will perhaps get the National Guard commanders to designate young men whom they want to be given this intensive training, and they will be sent there, and then if they want to enlist in the National Guard after that they will have gotten that much of a good start. So, though we are not pressing the thing this year, we are looking forward to making these training systems, both the Reserve Officers' Training Corps and the civilian military training camps, definite feeders, first for the National Guard, and second for the Organized Reserves.

Senator LENROOT. Under existing law, from a military standpoint, there is no value in this training except in case of a general war, and except as this training induces them to join these various other activities. That is true?

General LASSITER. That is true; yes, sir.

Senator HITCHCOCK. What is the policy, General, regarding the admission of men for training in successive years?

NATURE OF COURSES.

General LASSITER. The first year they attend what is called the red course. That is purely elementary instruction in the arm of the service that they wish to go into. The great bulk of them go into the Infantry. The boys who qualify that first year will then be given some sort of a correspondence course and perhaps training during the winter months, with the hope that they will come the next year to what is called the white course, which is a noncommissioned officers' course.

Senator HITCHCOCK. Then you desire to have them come successive years?

General LASSITER. Successive years.

Senator HITCHCOCK. That is, you would like to have all these 10,000 come back this year?

General LASSITER. As many of those who are qualified to receive the higher training as we can get back. That is the whole object of the thing—to develop men who are going to be officers and noncommissioned officers. We want those who attend the red course and who are considered noncommissioned officer material to come back for the white course this year.

Senator HITCHCOCK. And if you had 40,000 applicants you would give priority to those who had trained last year?

General LASSITER. We have assigned a quota this year to the different classes of camps—the red camp, the white camp, and the blue camp—the blue camp being the officers' camp. We had so few last year that that question has not come up yet, because we can easily take care within our quota of all who trained last year and who are qualified to pass into the white camp this year.

Senator HITCHCOCK. Suppose you are enabled by the appropriation to take care of 20,000 men: What proportion of them would be new, and what proportion would be students of last year's camp?

General LASSITER. Taking this particular year into consideration, I should say that we might have, say, 40 per cent of those last year qualified to come this year, making about 4,000, leaving, out of the 20,000, sixteen thousand that we could bring in new. That proportion, though, will increase from year to year.

AGE LIMIT OF TRAINEES.

Senator HITCHCOCK. What is the reason for increasing the maximum age limit from 25 years to 35 years? Am I right about that? It was limited to 25 years last year.

General LASSITER. It was limited to 35 before.

Major SULTAN. It has been 35 by congressional act. The law says:

Provided, That the funds herein appropriated shall not be used for the training of any person who is over thirty-five years of age.

Senator WADSWORTH. It is left within the discretion of the department to lower that?

Major SULTAN. To lower that.

Senator WADSWORTH. They must not train them over that?

Major SULTAN. And we have lowered it this next year to 27, unless a man has had service in the World War.

Senator HITCHCOCK. Oh, 27?

Major SULTAN. Yes.

Senator HITCHCOCK. I got that wrong.

Major SULTAN. We do not bar a man who was a private in the World War, for instance, and who desires to qualify as a noncommissioned officer or as an officer of the Organized Reserves. We will take him up to 35.

Senator HITCHCOCK. Was that true last year?

Major SULTAN. Yes, sir.

Senator LENROOT. My book shows that the Budget estimate proposes to increase this to 45. Is that right?

Major SULTAN. The War Department prefers to have it stay at 35, sir. It has been 35 and 45 in various congressional acts, and 45 was put in because Congress had said "45" in a previous year, and as long as the War Department has discretion in making a lower limit it does not make much difference whether it says "35" or "45." That is the maximum limit, you see. The War Department has discretion as to what the lower limit shall be.

Senator SPENCER. General, would the ex-service man who came in for the first time this year go into the red course or into the white course?

General LASSITER. It would depend upon his qualifications.

Senator SPENCER. He might go into the white course?

General LASSITER. He might go into the white course right away if he had had military training at least the equivalent of the training given in the red course.

Senator SPENCER. Might he go into the blue course if he were qualified?

General LASSITER. If he were qualified.

Senator SPENCER. If he had been a noncommissioned officer, for example, during the war?

General LASSITER. Yes.

Senator LENROO. Do you follow these men up afterwards, and ascertain to what extent they do go into the National Guard, the officers' reserve, or the enlisted reserve?

General LASSITER. We did not, last year, in any definite way. I happen to know that in Ohio quite a number of them did go into the National Guard. What we did last year, immediately after the conclusion of the camps, was to write letters to all of the parents to find out their reaction on the subject, to see whether they were interested in it, and what they thought about it; and those replies were almost uniformly favorable. Last year we did not make any strong effort to get them to identify themselves with any active unit, and there has been no specific following up of that to know how far it had gone; though I was talking yesterday with an officer from the National Guard of New York, who said that they had been trying to follow it up in New York; that they attended these camps and talked to the young men, and had been trying to follow up definitely how many of them did go into the National Guard; but this year I think we will be able to follow it up very much more closely and know more about it. You see, last year was really the first year.

Senator HITCHCOCK. Suppose a man enters the National Guard after having been in the camp last year: Does that make him ineligible to go into the camp this year?

General LASSITER. He probably would not want to do it, because his own troops would go out for training themselves. His National Guard unit would go out themselves.

Senator HITCHCOCK. At a different time?

General LASSITER. Yes, sir.

Senator HITCHCOCK. But, generally speaking, men who belong either to the National Guard or to the reserve do not go into these civilian camps, do they?

General LASSITER. Those who belong to the National Guard as privates are, of course, eligible for the white course and noncommissioned officers are eligible for the blue course. They can come in if their unit commanders want them to do it and they want to do it, but as a rule they prefer to go and train with their own commands.

Senator HITCHCOCK. So that for the most part, at least, these 10,000 men whom you trained last year belonged neither to the National Guard nor to the Reserve Corps?

General LASSITER. No.

OCCUPATIONAL STATUS OF TRAINEES.

Senator LENROOT. Are any statistics kept of the walks of life from which these boys come?

General LASSITER. I do not think we have anything of the kind in the War Department; but, as I remember, we had a complete card-catalogue description of every one of these boys at the camps. I should say that those are all on file at the corps area headquarters. We have not it here, have we?

Major SULTAN. No, sir. We wanted them to get a cross section of the boys, if they could get it. We wanted them to make an appeal to every class of boy—not merely to the high-school youngster or to the college boy.

Senator LENROOT. That is what I was asking about.

Major SULTAN. We wanted them all.

Senator LENROOT. Are you prepared to give us any information as to what such a cross section would show?

Major SULTAN. We have not complete statistics in the War Department. This has been very much decentralized. Each corps area under the general instructions of the War Department handles its own camps, and I fear that the War Department has not any detailed statistics.

Senator LENROOT. It would be very simple to make a report here, however, on that subject, would it not?

General LASSITER. I will have that looked up, Senator, and if we can get you something definite on that point I shall be glad to do it.

Analysis of the occupational status of 2,106 applicants to attend citizens' military training camps in one corps area embracing four States, 1921.

Student	1,615	Timekeeper	2
Clerk	97	Newsboy	2
Laborer	68	Brakeman, railroad	2
Farmer	32	Glass maker	2
Machinist	29	Apprentice	2
Mechanic	28	Locomotive engineer	2
Salesman	16	Clerk-typist	2
Chauffeur	15	Radio operator	1
Electrician	11	Trackman	2
Stenographer	10	Cutter helper	1
Mill worker	9	Stenographer-secretary	1
Draftsman	7	Administrative assistant	1
Bookkeeper	6	Tinning apprentice	1
Steelworker	5	Plumber's helper	1
Barber	6	Assistant architect	1
Mail carrier	6	Pipe fitter	1
Miner	5	Sheet-metal worker	1
Auto repairman	5	Ticket agent	1
Junior accountant	4	Miller	1
Lawyer	4	Real estate agent	1
Lineman	4	Jeweler	1
Baker	4	Mechanical engineer	1
Railroader	4	Law clerk	1
Painter	3	Journalist	2
Molder	3	Messenger	1
Drug clerk	3	Collector	1
Core maker	2	Delivery	1
Teacher	4	Bottling worker	1
Tool dresser	2	Bookbinder	1
Driver	2	Armature winder	1
Musician	2	Telegrapher	1

Motion picture operator.....	1	Quillor tender.....	1
Crane operator.....	1	Photographer.....	1
Butcher.....	1	Lathe operator.....	1
Business.....	1	Chemist.....	1
Silk weaver.....	1	Box maker.....	1
Poultry.....	1	Civil engineer.....	1
Furniture worker.....	1	Pattern maker.....	3
Motor mechanic.....	1	Store manager.....	1
Stock winder.....	1	Merchant.....	1
Knitter.....	1	Watchmaker.....	1
Horseman.....	1	Postal employee.....	1
Y. M. C. A. worker.....	1	Paper cutter.....	1
Factory worker.....	1	Plumber.....	1
Assistant treasurer.....	1	Cartoonist.....	1
Register and recorder.....	1	Weaver.....	1
S. M. worker.....	1	Detaller.....	1
Brick worker.....	1	Buyer.....	1
Railroad agent.....	1	Tailor.....	1
Instructor.....	1	Foreman.....	1
Woodworker.....	1	Paper reporter.....	1
Gardener.....	1	Telephone operator.....	1
Page boy.....	1	Vulcanizer.....	1
Printer.....	1	Quarryman.....	1
Paper hanger.....	1	Dairy head.....	1
Driver's helper.....	1	Mine motorman.....	1
Acetylene expert.....	1	Boy scout.....	1
Engineer.....	1		

Senator WADSWORTH. You find it wise to decentralize this work as much as possible, do you not?

General LASSITER. By all means, because we could not possibly handle it all from Washington. Moreover, we have put the responsibility upon these corps area commanders for developing the units in their own areas. That is their function, and it leads right up to their war function of being prepared to develop the three Organized Reserve divisions and the two National Guard divisions in their own areas.

Senator WADSWORTH. General, this has the advantage of bringing the Army closer to the people, has it not, when it is decentralized?

General LASSITER. Absolutely. I do not know that all the members of the committee are familiar with the manner in which this distribution by States has been made. Here is the distribution of the Organized Reserves throughout the States [referring to map]. The red figures show what we call the corps areas, and the green figures indicate reserve divisions: so that taking this corps area, the Ninth, there are three divisions here, and you will find that there are three divisions in each of the other corps areas, and the idea is to have these camps this summer in each one of these divisional areas. For example, there will be one camp up at Camp Lewis, another at Fort Douglas, near Salt Lake, and another down near the Presidio of San Francisco. Similarly, in this corps area [indicating the Eighth on the map] there will be one in the middle of Oklahoma, there will be one near San Antonio, and there will be one up near Denver.

Senator SPENCER. Where will those camps in the Seventh Area be?

General LASSITER. In the Seventh Area there will be one at Fort Snelling, near Minneapolis, one at Des Moines, and one at Jefferson Barracks, opposite St. Louis.

Senator LENROOT. This last year you did not have that many camps, did you?

General LASSITER. We did not have that many last year; no. We had 12 last year.

Major SULTAN. We have a total of 31 this year. Some of them are small, but the total number is 31.

Senator WADSWORTH. That saves transportation and localizes the interest more.

General LASSITER. That is the idea to try to get local interest stirred in turning out the proper quotas in their own local areas, and identifying them with the troops that come from that divisional area.

Senator WADSWORTH. It is a very healthy plan.

Senator LENROOT. What is the minimum number essential to constitute a camp?

General LASSITER. This year we ask for 30,000 men. That will give us approximately 3,000 for each corps area. In each corps area we have three reserve divisions, so that it will give us about 1,000 for each divisional camp, which would constitute about a regiment. A thousand is a useful number to train in any one camp.

Senator LENROOT. The House appropriation, then, would mean about 666?

General LASSITER. Yes.

Senator SPENCER. Is there a camp at Fort Riley?

General LASSITER. We do not expect to have these people there. We expect to have a great many National Guard troops at Fort Riley this year.

Senator LENROOT. Do you happen to know where a camp would be located in Wisconsin?

General LASSITER. Camp Custer. That is Michigan, however.

Senator LENROOT. That is Michigan. You had one here in Wisconsin.

General LASSITER. In that corps area this year there is only one camp for the C. M. T. C., and that is Camp Custer.

Senator LENROOT. Then you do not mean that there will be as many camps this year as there were last year?

General LASSITER. That is what we are working up to later on. Both Michigan and Wisconsin have very good places where there could be training. Grayling is one place and Douglas is the other.

Senator LENROOT. Those are State camps.

Major SULTAN. State reservations.

General LASSITER. If it would be interesting to the committee, this map also shows how the Organized Reserves are distributed. This is western New York, and shows the Ninety-Eighth Division, with headquarters at Syracuse, with one brigade over at Albany and the other brigade at Buffalo; so this [pointing] is a brigade area for the Infantry, and that is another brigade area, and then the different regiments are located as shown by those lines. The Cavalry is superimposed over the whole, and so is the Artillery.

Senator LENROOT. You mean, that is what is contemplated?

General LASSITER. No; that is what is actually done now. That is the way in which the Organized Reserves are being organized territorially.

Senator LENROOT. What have we outside of officers in the reserve?

General LASSITER. I mean that from this area, for example, comes the Three hundred and ninety-first Infantry, and over here will be

D Company in that town of that regiment. Here is C Company; there is B Company.

Senator LENROOT. What I mean is, they all consist of officers now?

General LASSITER. They all consist of officers; yes.

Senator WADSWORTH. I notice, for instance, in the case of the Ninety-eighth Division, on this chart that was presented yesterday, that 403 officers have been definitely assigned to duties, which is nearly half the quota of the division.

General LASSITER. Approximately half; yes.

Senator WADSWORTH. It is 44.5 per cent. There are only 12 enlisted men.

General LASSITER. We have not made any effort to get enlisted men until we get the framework ready.

Senator LENROOT. How are you going to get enlisted men except by a requirement that as a condition of training they shall join the enlisted reserves?

General LASSITER. The law requires that the enlisted men of the Organized Reserves have some military training prior to their enlistment in the Reserves. All ex-soldiers of the Regular Army and National Guard, and all veterans of the World War are eligible, and I think we can get a great many of them to affiliate themselves with the divisions with which they served during the war. I do not believe that there will be much trouble in getting the limited number we want.

The Organized Reserves will be made up of a framework of officers and noncommissioned officers and specialists, with very few privates. In case of an emergency recruits through voluntary enlistment or from a draft would be poured into this framework and complete units formed. Up to the present time we have not made any great effort to secure enlisted men. Our first efforts are being made to secure the officers. For example, the officer commanding D Company in a certain town gets everything straightened out, and he knows that there are two or three men in the town that perhaps served with the unit during the war and who would like to come in as sergeants in the reconstituted unit of the Organized Reserve. I do not believe that he would have any trouble in getting these men to sign up.

The new material that we will get through the series of red, white, and blue citizens' military training camps will supply any vacancies in the organization not filled by veterans. We hope that these men who pass through the white and blue courses will become enthusiastic and will identify themselves when they go home with the unit that belongs to their home town. As I have stated before, no effort will be made this year beforehand to obligate those attending these camps to enlist. During the progress of the camp it is our plan to explain the composition of the Army and the functions of each component thereof. At the conclusion of the camp those who have attended will be encouraged to connect themselves more directly with national defense by enlisting in one of its elements. It will be explained to them that the National Guard must be maintained in a greater state of readiness for active service than the Reserves, and that consequently, those who can give the necessary time to National Guard work will find in its organization an opportunity for earlier active service than with the Reserves.

Senator LENROOT. That is being done now, and if it is given preference in its training, then you would have something definite.

General LASSITER. That is what we are working up to. This system has been adopted in the last year only, and we have had to feel our way carefully up to it. There are different viewpoints on this whole situation. I think in another year we will have something definite on the subject.

NUMBER OF MEN IN EACH CAMP.

Senator HITCHCOCK. What constitutes a camp, approximately?

General LASSITER. It varies. We have camps as low as 500 or 600 men, and we have them as high as 1,500 men. They are generally particularly anxious to get a place where there is ample ground for practical training. At some places we will not be able to carry out as much practical training as we desire. Last year I commanded a camp where we had 30,000 acres, and could do everything, and we had all forms of firing, of every kind. I would like to say that these young men in the civilian military training camps had one week of preliminary work and the next week on the target range.

Senator HITCHCOCK. Was that the largest camp you spoke of?

General LASSITER. That was Camp Knox, Ky.

Senator HITCHCOCK. What is the smallest?

General LASSITER. This year we will have to carry on training at Jefferson Barracks, where we will have target practice, but will not be able to carry out these training problems that I spoke of.

Senator HITCHCOCK. Is this camp all Government property?

General LASSITER. All Government property. What we want to do is to get in each of these divisional areas a place which will enable us to get on this training, and is also a suitable place for mobilization.

Senator LENROOT. How about transportation?

General LASSITER. That is why we are reducing it down to divisional camps as far as possible, so that the travel would not be excessive.

Senator LENROOT. What area do you deem necessary for a camp?

General LASSITER. That is, the terrain?

Senator LENROOT. Yes.

General LASSITER. I should say 15,000 acres is very necessary.

Senator LENROOT. Do you mean that we have got to supply 15,000 acres for each one of these?

General LASSITER. We are not asking it now, but we do not want to give up, for example, a place like Camp Custer or Camp Knox, because we need them for training purposes.

Senator WADSWORTH. Of course, you have already salvaged Camp Custer, have you not?

General LASSITER. We have gotten rid of the buildings. We are going to have a tent camp this summer.

Senator WADSWORTH. On a tent camp?

General LASSITER. Yes; this summer. Wherever buildings exist, we use them as long as they stand.

Senator LENROOT. What is the size of the camp you spoke of near Minneapolis?

General LASSITER. Near Minneapolis there are, I believe, between 2,000 and 3,000 acres.

Senator LENROOT. That is Camp Snelling?

General LASSITER. Yes, sir.

Senator HITCHCOCK. How much have you at Des Moines?

General LASSITER. I do not know how much there is. We have Camp Dodge, and we could spread over into that.

Senator HITCHCOCK. That was Camp Dodge that was used during the war?

General LASSITER. Yes.

Senator HITCHCOCK. Was not that disposed of?

General LASSITER. It has not been disposed of. The buildings have been gotten rid of. It has probably been leased on a revocable license.

Senator HARRIS. Where is your camp in the Southeast?

General LASSITER. At Camp McClellan. That is the principal place. We also do a great deal of training at Camp Bragg; and there are various other camps in the Southeast. Including the National Guard, the Organized Reserve, the R. O. T. C., there will probably be as many as 10 different camps in the Southeast.

Senator LENROOT. To what extent are you able to cooperate with the States in the use of State reserves?

General LASSITER. The National Guard usually go to the State camps. Their training takes place there.

Senator LENROOT. I understand; but I mean for these purposes?

General LASSITER. This year we do not contemplate using any of the State camps.

Senator LENROOT. Would it be possible, at periods when they are not occupied by the National Guard, to make use of the State reserves?

General LASSITER. It is possible that that might be done. We have not been up against it this year to get places for the training, because we had these Federal tracts that were available.

Senator LENROOT. I understand, but you spoke of using Camp Douglas, in my own State, and you had six regiments there.

General LASSITER. That is a matter that the Corps Area commander will have to work out, as to whether he can utilize that this summer.

Senator HITCHCOCK. I understand there are only two camps in the seventh area.

General LASSITER. Three this year—Fort Snelling, Jefferson Barracks, and Des Moines.

Senator HITCHCOCK. They are all in the eastern portion. The western portion, which is the larger, has none.

General LASSITER. We tried to arrange to have one at Fort Riley, but the Corps Area commander had his own reasons for wanting it that way, and we did not reverse him.

Senator HITCHCOCK. That leaves Kansas, South Dakota, and Nebraska without any.

General LASSITER. Yes.

Senator HITCHCOCK. And that leaves quite a distance for transportation to one or the other.

General LASSITER. I think that another year we can get those matters on a better footing. This year we had to accept his decision.

Senator HITCHCOCK. You have several Government properties in there.

General LASSITER. But the density of population, you will notice, is about where he is going to have them. I would say that it would have been far preferable to have one of those camps at Fort Riley instead of at Jefferson Barracks or at Des Moines.

Senator SUTHERLAND. How large an area have you at Fort Riley?

General LASSITER. About 20,000 acres.

Senator HITCHCOCK. I am thinking particularly of Nebraska, which has several posts and no camp; and it is the same with South Dakota and Kansas. All of the camps seem to be located in almost the extreme eastern portion of the corps area.

General LASSITER. That is so.

Senator HITCHCOCK. It means a long travel for all those in the western portions of those three or four States.

General LASSITER. We had a good deal of correspondence with the corps area commander on that, and he was very insistent that that fitted in better with all of his plans than shifting farther west.

Senator SUTHERLAND. You have given up Camp Sherman?

General LASSITER. Camp Sherman has been practically turned over to the Veterans' Bureau.

Senator WADSWORTH. Have you any other matters as to the civilian military camps?

General LASSITER. No, sir.

Senator WADSWORTH. You have no other topics to discuss?

General LASSITER. No; that completes all that I have to say.

Senator WADSWORTH. Do the members of the committee desire to ask General Lassiter any other questions? If not, General, that is all, and we are very grateful to you.

The next is the Militia Bureau, page 79 of the bill.

MILITIA BUREAU.

STATEMENT OF MAJ. GEN. GEORGE C. RICKARDS, CHIEF OF THE MILITIA BUREAU, ACCOMPANIED BY MAJ. LOUIS C. WILSON.

Senator WADSWORTH. You may proceed in your own way, General.

General RICKARDS. The provisions of the national defense act require that the National Guard shall consist of not less than 800 men per representation in Congress, including United States Senators. It will be noted that the number is not, as has been stated by certain Members of Congress, the maximum, but on the contrary, represents the minimum.

It may not be out of place to remind you that by including United States Senators in the representation, we are disregarding the true proportion of population. Under the provision of the law, each State must furnish 1,600 National Guardsmen, whether it be Delaware with its less than 300,000 or New York, with its great population of more than 9,000,000.

The law provides that by June 30 in the year 1920 there should have been 200 National Guard for each Representative in Congress, and that this number should be increased each year by increments of 50 per cent, so that if we fulfill the obligations of the law the National Guard by June 30, 1922, should be composed of 450 officers and men for each of the 431 Representatives in Congress, being an aggregate of 238,950, as against 148,000 now Federalized.

That the provisions of the law have not been carried out is in no way attributable to a lack of military spirit in the States, but wholly due to the lack of funds necessary, under the provisions of law, to meet the financial requirements imposed by the recognition of added units. This appropriation provides for the fourth increment, and under the law the National Guard, by June 30, 1923, should develop into a force of 358,425.

To comprehend the true situation, it is necessary to know and understand the methods by which the War Department has undertaken to carry out the provisions of the law as they pertain to the National Guard, the main features of which you are all, no doubt, familiar with.

The committee of the General Staff provided for in section 3a of the national defense act were assembled in Washington during the month of July, 1920, but a few weeks after the passage of the act. After two months careful study of the problem, including conferences with State officials, the allocation of National Guard troops was made. This included all units necessary to make the complete organization and embraced practically all of the 424,800 or 800 per representation, imposed by the law to be reached by June 30, 1924. To this point, the work was entirely that of the General Staff, and from there, it was turned over to the Militia Bureau.

The problem of the Militia Bureau was the assignment of such units for organization by the States as were best suited to them within the given allotment, and having regard to the cost, being regulated by the amounts of the appropriations provided for that year. At no time has the appropriation been sufficient to warrant the bureau in authorizing anything like the number of organizations desired by the several States, as with such authority it is understood that Federal recognition will be granted upon completion of the unit. The States, however, have gone on with organization and many of them have companies, battalions and regiments organized awaiting but the word for recognition which must depend upon appropriation.

The appropriation bill which has just passed the House and is now before your honorable body, not only restricts and curtails the growth of the National Guard; but, in its present form will necessitate the withdrawal of a number of organizations already accepted and Federalized because of insufficient funds with which to carry on the work.

The Militia Bureau has endeavored to make it plain that the yearly maintenance of a soldier in the National Guard costs the Federal Government \$210, and that thereafter, under the law, he must be paid \$56.25 for his annual summer training and \$83.29 for armory drill pay. The balance of the \$210 is expended in replacing material.

The experience of the past two years shows that about 66½ per cent of the commissioned and enlisted strength qualified for armory drill pay, and that it is not safe to estimate less than 90 per cent attendance at the summer training camps. On March 31, we had 146,811 Federally recognized National Guard, and even though we should discontinue the recognition of new units the strength may properly be increased to 225,000 approximately by enlisting the number of units already recognized to the authorized peace strength of 93 men per company. The law authorizes such expansion.

What I mean to say is that even though we are not sufficiently provided with funds to carry on our work of recognizing new units in the National Guard, those that are already recognized are probably at an average strength, say, of 70. Under those conditions they would begin to fill up. If they could not get a new unit in a State they would begin to fill up the units that they had, and if they did that the units already recognized are capable of embracing 225,000 men at full strength.

On the question of armory drill pay, we believe that it will be possible to meet the obligations to be incurred with the amount of the appropriation now carried by the bill, but are much disturbed by the inadequacy of many other items which, if not increased over those now carried in the bill, can have none other than a detrimental effect upon the splendid spirit of progress now so high in the National Guard.

Like all training, that of the soldier is a progressive one, and that of armory training is but preliminary to the field training. Without field training the whole of our efforts to teach the military art is lost, and to limit such training below that now prescribed is to make doubtful the wisdom of the expenditure of money for preliminary training. The period of 15 days, now presented, is considered all too short by all persons well informed on military matters.

During the summer training period of 1921, which embraced the months of June, July, August, and September, 104,968 National Guardsmen were given 15 days' field training. On the last day of these months, the aggregate enlisted strength was as follows: June, 113,640; July, 118,700; August, 121,200; and September, 126,100. But it must be remembered that a large number of the men shown on the last day of September enlisted in the National Guard after their unit had returned from the summer camp and that a number of the organizations figured in this personnel were recognized too late to take part in such training.

It is a peculiar condition, one that in my own experience I have never witnessed before, that immediately after the encampment of last year there seemed to be a new incentive, and organizations that returned from their camps, instead of falling into a state of inactivity, continued their work and recruited. Men were anxious to get into the organization, and the recruiting did not fall off as it usually does. Heretofore, in all my experience, after coming home from camp, things are dropped until they begin to get ready for Federal inspection during the winter; but that was not the case, and that is not the case now. We have been praying in the Militia Bureau for a let-up so that we would be able to catch up, but there is no let-up. I do not understand it. It is not the service men so much that are coming in, but entirely new blood.

Interest in the National Guard is growing, and it is believed that the average strength throughout the training period will be not less than 160,000, and may reach 175,000. We feel assured that our estimate of 90 per cent is a conservative one, and that this number will take the summer training during the next fiscal year.

Senator HITCHCOCK. How many?

General RICKARDS. One hundred and sixty thousand, at least. This computation does not take into account officers' camps of instruction.

which have been heretofore conducted for four days each year, or of the national rifle competitions, to which we have sent teams of the National Guard each year since its establishment.

I do not recall, and I did not look up to see, how long we have been sending teams of the National Guard to these competitions, but it has been a long time. I can remember a long ways back in my own experience.

Both of these items properly belong to field training and instruction, and if this item in the appropriation is not increased, the Federal Government will be unable to fulfill its lawful obligations toward the National Guard.

EXPENSES OF CAMPS OF INSTRUCTION.

Senator WADSWORTH. Now, you are referring to the item in line 25?

General RICKARDS. No; I am referring now to the item for field training—camps of instruction.

Senator WADSWORTH. Page 80 in the committee print of the bill.

Senator HITCHCOCK. The House put it at \$6,500,000, whereas you asked for \$8,000,000.

General RICKARDS. No; we asked for \$9,500,000 on that particular item. I will take up these items in the order in which they appear in the House bill.

Senator HITCHCOCK. The House print shows that you asked for \$8,000,000.

Senator WADSWORTH. The Budget estimate was \$8,000,000, was it not?

General RICKARDS. The Budget cut us to \$8,000,000; that is right. But our estimate was \$9,500,000.

Senator HITCHCOCK. Did you use all of that \$8,000,000 last year, General?

General RICKARDS. We will probably use it, and will probably be a little bit in debt before we get through with it. We have used it up so closely that it will not be possible for us to have any officers' camps of instruction prior to the annual camp this year, probably.

Senator HITCHCOCK. How are these 400,000 men divided?

General RICKARDS. Into how many camps?

Senator HITCHCOCK. Yes.

General RICKARDS. I could not tell you that exactly, because the National Guard, in the main, camp in their own States, and sometimes they will have one general camp in a State and sometimes they will go to two locations in the same State; and in other cases two States have gone into one camp, on one camp ground.

Senator HITCHCOCK. Is it probably about the same proportion with the civilian training camps; do they have about 1,000 men in a camp?

General RICKARDS. Oh, no, sir.

Senator HITCHCOCK. I was asking how many camps these 400,000 men were trained in.

General RICKARDS. We might say, Senator, as a short cut to that, that we would average 48 camps, because the National Guard, as a rule, have their own camp grounds, and the States have their own camp grounds, and they go to those by preference. In fact, that is their desire, to go to their own camp grounds within their own States. In a few instances that has not been so, and one State has gone into another. But, to balance that, probably there are sufficient States that have held two camps in their own States; so that we might say

that in round numbers there were 48 camps of the National Guard last year.

Senator HITCHCOCK. Approximately 2,000 men to a camp?

General RICKARDS. That would depend entirely upon the State. Take New York; they ran a camp at the same place for about 7 weeks, and they would take in 2 or 3 regiments for 2 weeks or 15 days, and then take in 2 more; and four or five did the same thing.

Pennsylvania covered, six or seven weeks during their encampment, all at Mount Gretna, all at one place; all except the Artillery, which went to Tobyhanna. There they had an Infantry brigade in for 2 weeks or 15 days, and then another Infantry brigade, and then their Cavalry and Engineers and medical troops for another period of 15 days.

Senator HITCHCOCK. In what respect is their training different from the training in the civilian camps?

General RICKARDS. I am not familiar enough with the civilian camps, Senator, to draw a comparison, really.

Senator WADSWORTH. As a matter of fact, the instruction is far more advanced, is it not?

General RICKARDS. Yes; I would say so. An organized unit has its enlisted and commissioned personnel, and the camps of the National Guard compare more favorably with the training of the Regular Army. Their preliminary training is supposed to have been all had in the winter months in the armories.

Senator HITCHCOCK. About what area does each of their camps cover?

General RICKARDS. I can not tell you that exactly, excepting in those places that I am familiar with. Take Pennsylvania, for instance; they have 3,200 acres in the reservation. New York State, I believe, has about 1,500 to 1,600. They vary.

Senator WADSWORTH. They go far outside of the area of their own property.

General RICKARDS. Yes; they go outside, of course. I mean that is the area of which the State has absolute control. They often lease other lands over which to maneuver, and they use the highways.

Senator SUTHERLAND. Is the Pennsylvania camp at Tobyhanna?

General RICKARDS. Only for its Artillery.

Senator SUTHERLAND. Oh, yes.

General RICKARDS. The State camp proper, and rifle range, is at Mount Gretna. They have a reservation there of 3,200 acres.

Another item I have here is one pertaining to animals for the National Guard. You asked me if it was for training—an item of \$1,200,000.

Senator WADSWORTH. \$1,002,800.

General RICKARDS. Yes. The organizations already recognized as National Guard units under the provisions of law require 9,740 animals. That amount is \$1,948,000.

Senator SPENCER. The estimate says \$1,936,320. You can not go beyond the estimate of the Budget.

General RICKARDS. That is what we calculate will be necessary for the purpose.

Senator WADSWORTH. Are you speaking of the Budget estimate or of your own estimate?

General RICKARDS. No; that is our own estimate. I might properly go back and review this estimate a little bit further. I will come to that a little further along in my discourse here, but it will probably be well to understand it now.

The Militia Bureau made the original estimate based on the requirements of law, taking the law just as it stood, assuming that we had no right to surmise that this or that would not be done. Complying with the law as it stands now it would be necessary in the opinion of the Militia Bureau to provide an appropriation of \$43,000,000 to carry out the provisions of law in the next fiscal year.

The Budget Committee or the Budget, when they got that estimate, said, "That is out of the question. We can not give you but \$30,000,000." They did not intimate to us where that was to be cut, or how it was to be cut, but they just said, "In a lump sum we can set aside \$30,000,000 for the National Guard."

That went from the Budget to the House, and the House appropriated \$23,262,800. These cuts were made arbitrarily in the different appropriations, without regard to their importance.

Now, we come back and figure that we can do with our \$30,000,000, and we find that there are certain conditions that we have got to meet with this \$30,000,000; but, after eliminating things that we believe we can get through without, and putting the stress on those things of more importance, we are not really asking now for that amount of money, but rather our whole estimate, subdivided as we are presenting it, amounts to \$28,688,500. That is a little over \$5,000,000 more than is carried in the bill.

Senator WADSWORTH. It is your understanding, however, General, that it is these specific items for which estimates are made by the Budget, and before you can ask for an increase over that Budget estimate you will have to get a supplementary estimate?

Major BROWNE. I would like to say, Mr. Chairman, that the amount of \$30,000,000 was originally allocated to the Militia Bureau, and they were given the opportunity of allocating that to the specific items.

On that allocation was based the Budget estimate.

The House committee reduced those items, and to some extent the matter has received further consideration, and the Militia Bureau now desires to submit a reallocation, very much as the Quartermaster Corps did the other day. If it is satisfactory to the committee to so consider this reallocation, which would involve moderate increases in certain specific items with compensating reductions in others, I think we can promise that supplemental estimates will be processed through the Budget Bureau.

Senator LENROOT. I understand supplemental estimates will come in for the reallocation from the Budget Bureau?

Major BROWNE. That matter is now before the bureau.

General RICKARDS. I understand there will be supplemental estimates.

Senator LENROOT. Of course, when that is done you can ask for the increase of any item within the Budget estimate.

Senator HITCHCOCK. Was the Budget estimate in detail?

Colonel WILSON. By various items; yes, sir; aggregating \$30,000,000.

General RICKARDS. I am basing my whole plea on the fact I have been allowed by the Budget \$30,000,000.

Senator SUTHERLAND. They appropriated \$30,000,000 and you fixed your details under that?

General RICKARDS. Within the \$30,000,000.

Senator SUTHERLAND. And they adopted your details?

General RICKARDS. That is true. I do not recall what our original estimate was on this, but for camps of instruction our original estimate was \$12,000,000. That was cut to \$6,500,000.

Senator WADSWORTH. By the House.

General RICKARDS. By the House. We are now asking for \$8,000,000. So that after reconstructing our whole figure we find that the item for camps of instruction will necessitate \$9,500,000.

Senator WADSWORTH. It is expected this supplemental estimate, which you say is in course of preparation and will doubtless be sent in, will include the \$9,500,000?

General RICKARDS. Yes, sir.

Senator WADSWORTH. For extension of camps of instruction?

General RICKARDS. Yes, sir.

Senator WADSWORTH. Instead of \$8,000,000?

General RICKARDS. Yes, sir.

Senator SUTHERLAND. Will it increase the total beyond \$30,000,000?

General RICKARDS. No, sir; it reduces the total more than \$1,000,000.

Senator HITCHCOCK. Your estimate was originally \$40,000,000?

General RICKARDS. About a million and a half.

Senator HITCHCOCK. Your estimate was originally \$40,000,000?

General RICKARDS. \$43,000,000, our original estimate.

Senator SUTHERLAND. What is the total of the House items?

General RICKARDS. \$23,262,000.

Shall I proceed?

FOR COMPENSATION OF HELP FOR CARE OF MATÉRIEL, ETC.

Senator WADSWORTH. Just proceed with the items, then, General.

General RICKARDS. The item covering caretakers for animals, caretakers for Field Artillery guns, motor equipment, and airplanes, etc. The caretakers for the 8,000 animals now in the hands of the National Guard, together with the others for the proper care of material, will require not less than \$1,100,000. If 1,740 additional animals are issued, this item should read \$1,910,500.

Senator SPENCER. What line is that on?

General RICKARDS. I can not tell you.

Senator WADSWORTH. Lines 3 and 4, page 80.

General RICKARDS. That is for caretakers.

Senator WADSWORTH. That is for compensation of help for care of material, animals, and equipment?

General RICKARDS. Yes, sir.

Senator WADSWORTH. The Budget estimate is \$1,936,320. You are going to put in a revised estimate on the authority of the Budget for—

General RICKARDS. \$1,910,500.

Senator WADSWORTH. That is within the estimate?

General RICKARDS. That is within the estimate, but considerably above the present item in the bill.

Senator LENROOT. You are entirely free to ask this committee to increase any item in the bill up to the Budget estimate, but not allowed to go beyond that, unless a supplementary estimate is made.

General RICKARDS. We are going to make a supplementary estimate.

Senator LENROOT. Not you, but the Budget.

General RICKARDS. The Budget. I hope we might assist.

Senator LENROOT. May I ask, General, why has not that been done? Why have we not been furnished with that at this time? It puts the matter in a very awkward condition before this committee. You are asking for increases without anything before the committee that permits it.

General RICKARDS. Well, I presume I will have to assume the responsibility for that, Senator, because I was under the impression I was governed entirely by this \$30,000,000 appropriation of the Budget.

Senator LENROOT. That is, you thought you could come in and ask for any change of details as long as the aggregate was not above the aggregate of the estimate?

General RICKARDS. I am afraid I am a little like the urchin they picked up on the street and took to school. They asked him if he knew his A B C's. He said, "No, ma'am, I have only been here five minutes." I have not got broken in yet.

In the matter of field training.

This time covers field-training periods for 15 days required by law; schools of instruction for officers and selected enlisted men required by law and the attendance of rifle teams at national rifle contests. The average cost for field training alone is \$56.25 per man. There is every reason to believe that the National Guard will have a strength of 160,000 men by July 1, 1922, the first day of the period for which this bill is making appropriations. It is believed that the strength of the National Guard will average during the period 175,000 men. Our past experience indicates that the absentees from field training will not exceed 10 per cent. We should, therefore, provide for field training for not less than 158,000, which at \$56.25 per man represents possibly that this item should not be less than \$8,887,500. This does not include four days of instruction for officers and selected enlisted men, nor expense of rifle teams attending national rifle competitions, which will add \$600,000. It is for these reasons that the Militia Bureau believes that the minimum figure should be \$9,500,000; unless this amount is secured there will be a retardation, if not destruction, of interest in the development of the National Guard.

For expenses, selected officers and enlisted men, military service schools, there is appropriated \$250,000.

This amount will send approximately 156 officers and the same number of men to these schools. You are informed that over 220 National Guard officers applied to go to the Benning school alone last year. We were able to send only 80 to this particular school. The applications for all the other service schools, Field Artillery, Cavalry, etc., far exceeded the number allotted, and the item in its present form will by no means meet the demands made upon the Militia Bureau. It is the opinion of the Militia Bureau that money

utilized for this purpose brings greatest results to the National Guard and to the Federal Government.

Senator HITCHCOCK. General, I do not understand quite what was included in this item of \$56.25 per man for field training.

General RICKARDS. That includes the transportation, subsistence, medical attendance, and his pay.

Senator HITCHCOCK. That is about everything, is it not?

General RICKARDS. I hope so. I think that covers all of his expenses.

Senator LENROOT. That is, all the personal expense?

General RICKARDS. Yes.

Senator HITCHCOCK. You say it is transportation and subsistence?

General RICKARDS. It includes the organization expense. It includes all the expense of a field training period of 15 days.

Senator HITCHCOCK. How does that compare with the civilian expense?

Senator WADSWORTH. The transportation of a National Guard unit, I assume, is cheaper than the transportation of civilian military training camp recruits, which must come from widely scattered areas. The National Guard troops report at their armory and twelve hundred men are marched to the train and taken straight to the camp, which, of course, is a cheaper proposition than if those men come from many counties and have to make long railway journeys and transportation could not be done in bulk. Then, also, I am reminded, the National Guard is already clothed and equipped, and civilian military training camp recruits are not clothed.

General RICKARDS. Yes; National Guard units are entirely equipped.

Senator SPENCER. What amount do you think you ought to have instead of \$250,000 for the service schools?

General RICKARDS. We have not made an estimate on that. We have not asked for—

Senator WADSWORTH (interposing). The Budget estimate was \$348,410.

General RICKARDS. And it has been cut to \$250,000 by the House. That is a matter that is not vital probably. If it is absolutely necessary that we should estimate there, we would like to be able to send more officers. We are only presenting the matter now as to what might be done with this amount of money.

Senator WADSWORTH. It is from those officers I received the series of letters.

General RICKARDS. During the last school period we sent to the Infantry School at Camp Benning 80 officers; to the Cavalry School, 14; Coast Artillery, 13; Field Artillery, 18; Engineers, 4; Tank School, 2; Medical School, 5.

Senator LENROOT. What is the total?

General RICKARDS. One hundred and thirty-six.

Senator WADSWORTH. Those men took a 3-month course, did they not?

General RICKARDS. Those men took a 3-month course; yes, sir; and I think probably the best money that we spent. Since the school system has been inaugurated we have graduated from them 172 Infantry officers, 47 Cavalry officers, 15 Coast Artillery, 41 Field Artillery, 12 Engineers, 6 from the truck, 10 from the medical, and 3 from the Signal Schools.

Senator WADSWORTH. You find those men when they return to their National Guard units are exceedingly valuable, do you not?

General RICKARDS. They are of wonderful value to the National Guard. A young man who was a captain in my regiment overseas attended the camp at Benning. He is now captain of a howitzer company of the One hundred and twelfth Infantry. He had been a machine-gun officer on the other side all through that service, and he tells me that he has learned more in his three months down there about machine guns, howitzers, and 37-millimeter guns than in all his service on the border and in the World War, because it was put to him in a systematic way, and he believed he could go back and impart the same instructions and give the same benefits to those with whom he came in contact.

It is the intention of the State of Pennsylvania—and I believe it is the same intention throughout the States—to use those men as special instructors at the State's expense not only in their own units but in other organizations, wherever their services may be used.

Senator WADSWORTH. The next item.

PAY OF PROPERTY AND DISBURSING OFFICERS.

General RICKARDS. The matter of pay of property and disbursing officers. This is found insufficient. There is considerable complaint about the present inability to pay prescribed compensation. The amount should be increased to at least \$75,000.

The pay of property and disbursing officers is based entirely upon the number of troops in the State in which he has to serve, and they are outgrowing now the money that has been appropriated. The States are increasing their force and, consequently, increasing the money that should be paid to the property and disbursing officers, and the fund as it is now provided for will not permit us to carry out the program.

It has been the policy to send the officers and noncommissioned officers of the Regular Army to make not less than four visits per year to the organizations of the National Guard, where the organizations are not located at the station of the regular personnel. The appropriations for the current year have been absolutely insufficient, and only one visit has been made in lieu of four. We are losing a great deal of benefit by this failure to have the necessary funds to cover this travel. Some of the States have met this expense from State funds. If we are to get full value of our regular instructors on duty with the National Guard this amount should be increased to \$500,000. It is now \$200,000.

Senator HITCHCOCK. You only had \$85,000 last year.

General RICKARDS. That is true, but that was increased. That was one of the items that was transferred. We came into Congress and asked for an increase in that.

Senator SPENCER. What was the increase?

General RICKARDS. I think it was increased to \$500,000, was it not?

Major WILSON. \$100,000 more; a total of \$185,000.

General RICKARDS. \$185,000 is what we had last year.

Your attention is invited to line 14.

Senator SPENCER. Line 14 is what you are already talking about:

For travel of officers and noncommissioned officers of the Regular Army in connection with the National Guard.

REPAIR OF FEDERAL PROPERTY.

General RICKARDS. That might be line 14 on your bill. I think this refers to the repair of Federal property.

Your attention is invited to this amount, \$20,000, and for the purpose of calling attention to the fact that the National Guard now has seven air squadrons in addition to quite a number of heavy field pieces, and this appropriation is designed for the repair of such property. It is the opinion of this bureau that the amount stated in line 14 would not repair the Federal property for one air squadron, let alone seven. It is brought to your attention for such action as you may deem fit. These seven units were not in existence when the original estimates were prepared.

Senator SPENCER. Will there be new estimates for this?

General RICKARDS. I do not think it was our intention to make a new estimate on that; no, sir.

Senator WADSWORTH. Then, General, you can not get any more than \$25,000.

General RICKARDS. It only carries \$20,000 now.

Senator WADSWORTH. Yes; but the Budget estimate is \$25,000.

General RICKARDS. The Budget estimate is \$25,000, and I am not very keen myself on air units in the National Guard.

Senator WADSWORTH. Of course, that is a matter of policy. There are some people who are very keen about it.

General RICKARDS. I know there are, but I am afraid that the air unit in the National Guard is going to be an excessively costly one. It has proven so so far, and I would prefer to go along without organizing any air units additional to what we now have, and experiment on these before we go any further.

Senator SPENCER. Do you think those you now have are desirable and essential?

General RICKARDS. No; I do not, to be candid. I do not.

Senator SPENCER. The Air Service seemed to think when you were here that you would very cordially approve it. They said, "Wait until the Militia Bureau comes on and they will tell you how much is needed for the Air Service in connection with the National Guard."

General RICKARDS. I think every squadron we have of Air Service will cost us \$60,000 a year to keep it up. So, so far as \$20,000 and \$25,000 is concerned, it does not amount to very much for the seven units. It may be that after we have tried the thing out for a year or two and have experience it it we may find that it will fit into the National Guard, but just at the present time it is an experiment. I do not think we ought to go too deeply into it or inaugurate too many units until we do know just exactly its possibilities in the National Guard. I am willing to go on with the seven we have and develop them to their highest capacity of efficiency and see what we can do with them, but I think it is wrong for us to go into it headlong and organize our units promiscuously.

Senator HITCHCOCK. This item does not seem to be confined to air units. It says, "For repair of Federal property issued to the National Guard." Is that the only Federal property issued to the National Guard?

General RICKARDS. Including Air Service.

Senator LENROOT. How do the units of the National Guard compare with the units in the Regular Army?

General RICKARDS. That is, in their character?

Senator LENROOT. Yes, sir.

General RICKARDS. They are supposed to be identical.

Senator LENROOT. You have, or did have at the time of the House hearing, Infantry, 84,254; Field Artillery, 23,201; Cavalry, 12,621; is that the same?

General RICKARDS. About; yes.

Senator LENROOT. Coast Artillery, 6,102. Then I find antiaircraft units. Do we have any such units in the Regular Army?

General RICKARDS. Yes, sir.

Senator LENROOT. Under what head?

General RICKARDS. That comes, I believe, under Coast Artillery.

Senator LENROOT. Here is Coast Artillery, 6,102. Then there seems to be a specific subdivision that I have not observed in the Regular Army, and that is antiaircraft units, as such.

General RICKARDS. I believe that they are under the jurisdiction of the Chief of Coast Artillery.

Am I not right on that, Colonel Gulick?

Colonel GULICK. Yes; that is true.

General RICKARDS. They have the units.

Senator LENROOT. Yes; but there is no such subdivision in the Regular Army?

General RICKARDS. No.

Senator LENROOT. There seems to be in the National Guard?

General RICKARDS. No, no.

Senator LENROOT. I find the testimony says Coast Artillery, 6,102; antiaircraft, 3,183.

General RICKARDS. Antiaircraft regiments we term as "corps troops." They are not a part of a division at all, but they are corps troops, a very nice unit, and the States that have them are very much pleased with them; and, in fact, I would not object to commanding an antiaircraft regiment myself in the service. It is made up of three or four different units, artillery, heavy machine gun.

FUNCTION OF NATIONAL GUARD.

Senator LENROOT. General, what is the most important function of the National Guard in its various missions?

General RICKARDS. I do not know as I get your question.

Senator LENROOT. Well, for instance, in the Regular Army the protection against riots comes sixth or seventh in its functions.

General RICKARDS. Well, in that relation its most important function is to augment, I think, in an emergency, the Regular Army. Its secondary mission, so far as we look at it from the Federal viewpoint, is the policing in aid of the State.

Senator LENROOT. That occupies a higher position in the guard than it does in the Regular Army, does it not?

General RICKARDS. Yes.

Senator LENROOT. Would that not be a reason for not assigning the same units relatively in the guard that you have in the Regular Army?

General RICKARDS. I do not think so, sir. I think that our mission is to organize or to make a compact organization. Personally, I am very much interested in the divisional organization in the States, and I am making every effort to complete the divisions as far as possible. At the present time we have but two complete divisions, one in New York State and the other in Pennsylvania. It is pretty close

to it in other localities where two States, for instance, make up a division. They are very close to it; they have their brigades, for instance, completed in many instances, and I think that is the thing that we should turn our attention to just now—to complete the divisions.

There are certain corps of Army troops that I believe are essential—for instance, the arm that you are just speaking of, the anti-aircraft regiments. They are corps troops. The Cavalry are corps or Army troops, and the heavy artillery. After you get into the heavy and semiheavy artillery, they go in the corps troops and have no place in the divisions. The 75's are the heaviest artillery we have in the divisions.

I think that should be our policy, to complete these National Guard divisions as quickly as possible; and I think that they ought to have in those divisions every element and every arm that goes to make a division.

Senator LENROOT. But, General, appropriations are limited. You would like to have \$43,000,000 for the guard during the next fiscal year. That is impossible; and you bring down your own estimate now to \$28,000,000. In having so large a force of Cavalry, for instance, it is going to prevent the increase of the guard. If you did not have so large a force of Cavalry, could you not have more of Infantry? Does it not cost very much more per man for Cavalry than for Infantry?

General RICKARDS. That is just what I was saying, Senator. I am not so anxious about the corps and aircraft troops as the divisional troops; the division does not include Cavalry.

Senator LENROOT. That is what I am getting at.

Senator WADSWORTH. In other words, it is your policy not to increase the Cavalry?

General WADSWORTH. Not to increase the Cavalry; no.

Senator WADSWORTH. But to allow the Infantry and signal and medical troops to catch up?

General RICKARDS. To organize by organizing the complete divisions. I believe if we have 18 complete National Guard divisions so organized that they can be expanded to war strength, that with our Regular Army we will have a very creditable force.

Senator LENROOT. What would be the total personnel in 18 divisions?

General RICKARDS. About 370,000, in round figures.

Senator WADSWORTH. War strength?

General RICKARDS. Yes.

Senator WADSWORTH. Peace strength, you only average about 10,000 or 11,000 to a division?

General RICKARDS. Peace strength, we have 11,024, I think it is, or something like that—about 11,000.

Senator HITCHCOCK. General, in case of war those divisions would not go in as divisions in the Army, of course?

Senator WADSWORTH. That is exactly what they would do if the national defense act was followed.

General RICKARDS. It provides for that.

Senator HITCHCOCK. The whole policy of the War Department was just the opposite.

Senator WADSWORTH. And we have legislated since.

General RICKARDS. That is just exactly what we have been trying to do in the national defense act, and in the amendments, particularly, to obviate what occurred in 1917.

Senator WADSWORTH. That can not occur again unless the President and the Secretary of War entirely disregard the act of Congress.

General RICKARDS. That is what the National Guard is looking forward to, in hopes of an organization that will maintain its identity and its organization when called into the Federal service. The National Guard, both the officers and men, are anxious to be recognized as a Federal asset, ready to be called into service and to act in the capacity for which they have been trained; and along that very same line I might say here that it is very desirable on the part of the National Guard officer that he be given a Federal commission; that he would be recognized in the same capacity as a National Guard man as the officer in the Officers' Reserve Corps is now recognized. He has taken a Federal oath and so has the enlisted man, and they believed when they took that oath that they could be called into the service without any further qualification; that that really constituted them a Federal officer, and the thing that the National Guard has been working toward for years. I think if the National Guard officer were given a Federal commission, one that would be effective when called to the Federal service, it would raise the morale and the esprit de corps of the National Guard very considerably.

Senator WADSWORTH. He can take the Federal commission now, can he not, General?

General RICKARDS. There is some question about it. I have given a good deal of attention to it and it seems that commission must, according to the law department of the War Department, come through the Officers' Reserve Corps.

Senator WADSWORTH. Well, yes. The statute provides specifically that National Guard officers may also be commissioned in the Officers' Reserve Corps.

General RICKARDS. Yes; that is true.

Senator WADSWORTH. And I think you have many hundreds of National Guard officers who have taken advantage of that opportunity.

General RICKARDS. Yes; a great many of them. But there has been a good deal of confusion in it; a policy has been established and has been withdrawn; and I would not be surprised but what you will hear from that. That is aside from the question we are talking about now, but I would not be surprised if you would hear from that later on.

Senator LENROOT. General, how many men do you expect to care for with the \$28,000,000 you are now asking for?

General RICKARDS. One hundred and sixty thousand.

Senator LENROOT. Will any new Cavalry units be included in this increase?

General RICKARDS. No.

Senator LENROOT. That will give you an increase of about 17,000?

General RICKARDS. No; I think we have reached our limit on Cavalry.

Senator WADSWORTH. I think it is fair to say that the cavalry situation was rather unusual. The National Guard had organized a lot of Cavalry prior to the World War, and while that personnel was not

used as Cavalry during the World War, the men upon returning home, having been assigned largely as machine gunners and in Artillery, insisted on going back to the Cavalry. I know how it worked in the State of New York. We had in New York a complete regiment prior to the war of 15 troops, with a strength on the border in that regiment of 1,500 men. We also had co-called Squadron A in New York of five troops, recruited to pretty close to war strength. They were all made into machine gunners during the war, but when they came back they said, "We want to go back to the Cavalry again," and they had their armories and their State facilities built for the purpose of housing Cavalry, and so they made a mighty appeal to General Rickards and the War Department to permit them to be reorganized into these old Cavalry units, and the department properly, I think, yielded to that plea, because the State had provided and obligated itself to maintain Cavalry and had built armories for them. That gave us a surplus of Cavalry in New York. We had five or six too many troops of Cavalry when the reorganization of the National Guard took place. Now New York will not ask for any more Cavalry. We have just what we had before. I think the same is true, perhaps, in Pennsylvania.

General RICKARDS. Yes.

Senator WADSWORTH. They went back to their Cavalry units, and I think I am not far wrong in saying the 12,000 Cavalry you have now are practically a repetition of the units you had before the war, although recruited now to a greater extent.

General RICKARDS. That is true.

Senator LENROOT. General, what does Cavalry cost per individual compared to the individual of the other units?

General RICKARDS. This figure I have given you is an average.

Senator LENROOT. How much per man?

General RICKARDS. \$210.

Senator LENROOT. I thought that was for all of them—for the whole Guard, that \$210 average.

General RICKARDS. Yes.

Senator LENROOT. I mean how much of it will the Cavalry cost as compared with the other units?

General RICKARDS. As compared with the Infantry?

Senator LENROOT. Yes.

General RICKARDS. Major Wilson, my quartermaster and finance officer, tells me that it would run it up to about \$300.

Senator LENROOT. Do you not think it would cost more than \$90 a year for the horse?

Senator WADSWORTH. Yes; but the Government does not supply a horse for every cavalryman. The Government supplies 32 for a troop and the men themselves very generously supply the rest out of their own pockets.

General RICKARDS. The men or the State?

Senator WADSWORTH. The men or the State; and generally the men. In my own town the Government gave us 32 horses and the troop has 75 horses altogether.

Senator LENROOT. You mean \$300 irrespective of the value of the horse, I take it?

Major WILSON. Yes.

Senator LENROOT. Maintenance?

Senator SPENCER. That is the maintenance of the horse?

Major WILSON. The horse and caretaker.

Senator WADSWORTH. Then it is the fixed policy, as we understand it, not to increase Cavalry in the present figure?

General RICKARDS. That is my policy, not to increase Cavalry.

Senator WADSWORTH. Is there any other branch or arm now existing in the National Guard that you do not intend to increase for the time being?

General RICKARDS. Well, yes; I am not in favor and do not want to increase the Air Service and the heavy or 155 artillery.

Senator WADSWORTH. Is that an expensive arm to maintain?

General RICKARDS. Yes; it is expensive both to the Federal Government and to the States. In the first place, it puts a large burden, a heavy burden, on the States to prepare to furnish shelter for them and housing. It takes an immense area to take care of them, and it has got to have a number of caretakers who must be paid; the cost of transportation is enormous to transport one of those regiments of 155 artillery.

REDUCTION OF CERTAIN UNITS.

Page 82, strike out lines 6, 7, 8, and 9. That is the elimination or withdrawal of certain units in the House bill.

Senator SPENCER. That is the mounted, motorized, and tank units of the National Guard.

General RICKARDS. That is it.

Senator SPENCER. Line 7, page 82.

General RICKARDS. These lines in the House bill make it mandatory to break up National Guard units already in existence for which the States have provided armories, storage facilities, stables, riding halls, etc., and it is known that such action will meet with a storm of protest. Many of the States have made great efforts to convert former units into these mounted, motorized, and tank units of the National Guard, and I have been reliably informed that the States which have these units do not wish to convert them into anything else at the present time. Arrangements have been completed, and, if a change is made—

I might say here that at the beginning, when we found that we had more Infantry probably than we could take care of and it was necessary to convert some of it into other arms of the service, there was great dissension on the part of the organizations that had to be so converted, but we went along with the project and made the conversion and they are now installed in other arms of the service, and in most cases prefer to maintain what they now have rather than be changed into something else. I personally believe that serious damage will result to the morale of the National Guard. Every unit now in existence which has been recognized should be permitted to continue. There is, however, no objection on the part of the Militia Bureau to refuse to accept any further units of this kind during the ensuing year; and, it is believed a provision to that effect should be placed in the bill rather than one demanding reduction on the part of the War Department of such units of the National Guard.

In this connection, your attention is further invited to the fact that the lines specified omit the most expensive units connected with the National Guard, namely, the Air Service. If economy is to be sought rather than efficiency, it is believed the air squadrons should not be organized and should be placed under the ban exactly the same as cavalry, motorized artillery, and tank units.

Senator LENROOT. Under what head do tank units come—Infantry?

General RICKARDS. Yes; it is a part of the Infantry.

Senator WADSWORTH. Have you many of those tank units organized?

General RICKARDS. There is a tank unit with each division, but how many of them are organized I can not tell you.

Major WILSON. We have 11.

General RICKARDS. Eleven organized?

Major WILSON. Yes, sir.

General RICKARDS. Furthermore, when such units are disbanded the States will no longer house the matériel which has been furnished to their organizations and the Federal Government will then be compelled to hire storage for the property, to transport it back to the storehouses under Federal control or to dispose of it, at probably a ruinous figure, where it now is stored.

The reduction of any of these units would bring a storm of abuse from all the States and would require an increased appropriation to pay for the transportation of this matériel back to the Federal storehouses. It is further brought to your attention that, due to the scarcity of money for transportation, some of the States have paid transportation charges on animals, motorized equipment, and tank units. After this expenditure on the part of the States and the erection of suitable housing facilities, to remove this matériel from the States would certainly be unjust. It is suggested that the following words be substituted for those omitted—I do not think I will suggest that; strike that out.

Senator LENROOT. Right there—it might be valuable to the committee if we should conclude to accept your suggestion to have your language.

General RICKARDS. All right, sir; the following words to be substituted:

The Cavalry, motorized, tank and air units of the National Guard already recognized shall be continued, but no appropriations made in this act shall be available for the organization or equipment or field training of new Cavalry, motorized, tank and air units presented for Federal recognition after the date of its passage.

There is only one objection I have to that and that is it might curtail the organization of divisional artillery, which I would not like to see done. I am very anxious to go on, as I said before, with the divisional organizations, which include two 75-millimeter regiments and necessarily require animals.

Your attention is called to the fact that the estimates prepared for the Militia Bureau under the provisions of law carried a total of \$43,000,000, and these estimates were in no way padded; they represent the actual amount of money necessary for the Militia Bureau to carry out the Federal provisions of Federal law, affecting the National Guard. These estimates, when submitted to the Budget Committee, were reduced to \$30,000,000. They were further reduced by the House committee to \$23,333,000. It must therefore be apparent that to handle the National Guard this year it will be a very difficult problem and will require a very careful handling of any money that is appropriated.

I realize that Congress is opposed to lump-sum appropriations, yet it is the best arrangement for handling an inadequate appropriation. It was the form for National Guard appropriations until two years

ago. Attention is invited to section 67, national defense act. In the last appropriation bill there was inserted a restriction on certain appropriations for the National Guard, which limited the variation in the amount for any specific purpose to 20 per cent of the face value of the appropriation.

This provision ordinarily would be satisfactory to the Militia Bureau if the appropriations requested were actually made by Congress. But our appropriations have been cut by the Budget Bureau, have been cut by the House committee, and unfortunately not in proportion to their importance. The variation of 20 per cent has not proven satisfactory during the present year. The development of the National Guard was held up for a period of over three months by reason of the exhaustion of the funds "for travel of officers and enlisted men of the Regular Army in connection with the National Guard," and the exhaustion of funds under the appropriation for "Transportation of equipment," even after we had applied the 20 per cent increase authorized by law.

I might say right here that the States in many cases have paid the transportation on horses and on matériel out of their own funds and for the travel of officers. For instance, there was a period that we had no money for travel at all and the States paid the transportation and the charges of moving the household effects of officers whom we were detailing as instructors to their States. They have done the same thing on matériel, on guns—that is, heavy ordnance—and on horses for the sake of getting them.

It was necessary for us to go to Congress to secure additional legislation to authorize a switching of appropriated National Guard funds in order that we could continue developing the National Guard. We are confronted now with an emergency which can not be met by the 20 per cent authorized switch. We are again compelled to request an additional transfer of \$175,000 to "Transportation of equipment." This entails delay and impairs morale of the new National Guard organization. So far as it is known, no one has ever accused the administration of the Militia Bureau of misdirecting or misuse of appropriations for the benefit of the National Guard; and we believe that in view of the severe reductions made it is necessary to place at least some of these appropriations in lump-sum form; and in order to get them adjusted properly, the following suggestions are made:

Amounts on page 80, lines 3, 9, 12, 15, and 18, to be used as a lump sum; or

Amounts on page 80, lines 3, 9, 12, to be used as a lump sum, and amounts on page 80, lines 15 and 18, to be used as a lump sum; or

Twenty-five per cent change of any sum by transfer from unpldedged funds.

The exhaustion of one of the appropriations in the present form of the bill may absolutely block the instruction and the development of the National Guard; the reductions made in our estimates have been made arbitrarily, without due weight to their relative importance. The Militia Bureau can get far greater results if these funds are thrown into one lump sum, which can be expended as the occasion arises. If this combination of appropriations is not permitted, a provision in the law similar to that of last year will be of some aid; but without doubt, due to the small appropriations made, the Militia Bureau will be hampered very much indeed in its development of the National Guard during the next fiscal year.

The increase requested over the House bill is \$5,425,700. The Militia Bureau will do all in its power with whatever appropriations are made, but desires to point out that the Federal duties, under the law, can not be fully complied with under the House appropriation bill.

The growth of the National Guard can be arrested, if such be the desire of Congress, but the result we believe will be to destroy its morale. The Militia Bureau is concerned only in placing before Congress the minimum requirements, so far as they can be foreseen, for the retention of the National Guard during the fiscal year 1923.

Senator LENROOT. Now, General, I will ask you a question.

General RICKARDS. All right, sir.

Senator LENROOT. There are certain items you can come back to Congress and ask for a deficiency for if they are not sufficient?

General RICKARDS. Yes, sir.

Senator LENROOT. And there are certain other items you can not come back to Congress and ask for a deficiency for if they are not sufficient; is not that true?

General RICKARDS. Yes, sir.

Senator LENROOT. If you are permitted to transfer 25 per cent it will be very easy to transfer 25 per cent from the items where you can get a deficiency and put it on the items where you can not get a deficiency, will it not?

General RICKARDS. Yes; we had that provision in the law last year to the amount of 20 per cent.

ARMS, UNIFORMS, EQUIPMENT, FIELD SERVICE.

Senator WADSWORTH. General, what have you to say of that appropriation on page 81 of \$2,000,000, under the heading of arms, uniforms, equipment, etc., for field service, National Guard? The budget estimate was \$6,000,000 and the current appropriation is \$5,500,000.

General RICKARDS. Why, I think that that is satisfactory. I think we will be able to get along with that.

Senator WADSWORTH. You mean by drawing on reserve supplies?

General RICKARDS. By drawing on reserve supplies.

Senator WADSWORTH. Is there anything else you want to ask, General Rickards?

Senator LENROOT. This item on line 10, page 81, do you think you do not need it?

Senator WADSWORTH. As I understand the general, the budget estimate did not contemplate the withdrawal of supplies from reserve. The house has directed that they be withdrawn from reserve, as the bill of last year did it, so the budget estimate is placed upon a different theory; on the theory that the reserve supply should not be encroached upon by current wear and tear, but should be maintained intact, and that the Congress each year should appropriate enough to meet all wastage and keep the reserve intact. Of course, that is a matter of policy entirely, but you are satisfied that with \$2,000,000 plus your right to dip into reserve as well as surplus, you will get along?

General RICKARDS. We will get along with it; yes, sir.

Senator LENROOT. But I think we ought to have from the General what now he thinks that should be if the words "or reserve" are stricken out.

Senator WADSWORTH. Suppose you were denied the right to draw on reserve stocks and would only have surplus stocks and would then have to buy in the market?

General RICKARDS. I am afraid we would be short.

Senator WADSWORTH. How much?

General RICKARDS. We will put that in the record.

NOTE.—When the House of Representatives Committee on Appropriations was conducting hearings on the estimates for the National Guard for the fiscal year 1923, question arose as to the required amount for paying for such National Guard equipment as was not available with the Army for free issue to the National Guard. The Chief of the Militia Bureau obtained from the various supply services of the Army itemized lists of such equipment as could be furnished the National Guard free of charge during the fiscal year 1923, and informally advised the House Committee conducting the hearings in question that it was considered that in view of the statements from the supply services above referred to, the estimate of \$6,000,000 was apparently too high, but that \$3,500,000 should be appropriated. The amount contained in the bill as reported by the House Committee, and as enacted by the House of Representatives, was \$2,000,000. This reduction is, presumably, based on the fact that the bill contains a proviso as follows:

"That the Secretary of War is hereby directed to issue from surplus or reserve stores and matériel now on hand and purchased for the United States Army such articles of clothing and equipment and Field Artillery, Engineer, and Signal matériel and ammunition as may be needed by the National Guard organized under the provisions of the act entitled 'An act for making further and more effectual provision for the national defense, and for other purposes,' approved June 3, 1916, as amended by the act approved June 4, 1920. This issue shall be made without charge against militia appropriations. None of the funds appropriated in this paragraph shall be used for the purchase of arms, Field Artillery, Engineer, or Signal matériel, public animals, or chevrons."

Immediately following a query by the chairman of the Senate Committee on Appropriations conducting the hearings on the Army appropriation bill, as to whether the elimination of the word "reserve" in the above quoted proviso would affect the sum of \$2,000,000 provided to pay for such equipment for the National Guard as could not be supplied free from Army stores, further inquiry was made of the supply services regarding this question.

The Quartermaster General, the Chief of Ordnance, the Surgeon General, and the Chief of Engineers advise that the elimination of the word "reserve" would have no appreciable effect on their previous information that specified articles of equipment would be furnished free of charge to the National Guard during 1923. The Chief Signal Officer advises, however, as follows:

"The Signal Corps will require approximately \$500,000 for the Militia Bureau during the fiscal year 1923, for Signal Corps equipment which will have to be purchased, as none of this matériel is in any stock under the control of the Signal Corps.

"The Signal Corps has not included in its estimate for the fiscal year 1923 any amount of money for equipping the National Guard. It is recommended that the following sentence, commencing on page 82, line 3, be excluded from the annual appropriation bill, H. R. 10871:

"None of the funds appropriated in this paragraph shall be used for purchase of arms, Field Artillery, Engineer, or Signal matériel, public animals or chevrons."

From the information furnished the Militia Bureau by the office of the chief signal officer of the Army, the proposed free issue of all signal equipment to the National Guard can not be accomplished because it will not be available.

If such equipment as can not be furnished free by the Signal Corps is to be paid for from National Guard funds, it must be paid for from the \$2,000,000 tentatively provided for by the bill as it stands at present, but such purchase would be prohibited by the clause above quoted which states that no funds appropriated shall be used for the purpose of " * * * signal matériel." If this clause remains in the bill and the Signal Corps can not supply the articles free, the National Guard will be without signal equipment except as to such items as can be furnished free.

In the matter of Engineer equipment, the proposed appropriation of \$2,000,000 also includes funds for the purchase of certain articles of Engineer equipment

which, according to the statement of the Chief of Engineers, can not be furnished free during 1923, but the above prohibition against such purchase as now contained in the bill will prevent such expenditure.

In the matter of Field Artillery, the major portion of all ordnance equipment for such units will be furnished free by the Ordnance Department, but there are certain items such as spare parts, etc., not amounting to a great sum in value, which, according to the Ordnance Department, can not be furnished free because an excess beyond the needs of the Army does not exist. Under the above-cited prohibition, such purchase from the \$2,000,000 could not be made, and the National Guard would be, accordingly, severely handicapped.

In view of the above, therefore, and from the information furnished this bureau by the supply services, to the effect that most of the equipment for the National Guard during the year 1923 can be furnished free of charge, the proposed sum of \$2,000,000 would appear to be sufficient with which to make necessary purchases, but it is recommended that the words "None of the funds appropriated in this paragraph shall be used for purchase of arms, Field Artillery, Engineer, or Signal matériel, public animals, or chevrons," be eliminated, or that they be modified so as to allow the transfer of funds from the appropriation \$2,000,000 for purchase of necessary items of Field Artillery, Engineer, or Signal matériel. If this be done, care will be taken to see that no such transfer of funds is made for any of the itemized articles which the supply services are on record in this bureau as stating will be available for free issue to the National Guard and which constitute a very large majority of all articles of equipment.

In this connection, attention is invited to the fact that the word "surplus" as used in the provision in the bill is subject to misunderstanding and wrong construction, and it is recommended that the words "excess, surplus, or reserve" be substituted for the words "surplus or reserve" in line 18, page 81, of the bill, or if it be determined that the word "reserve" should be eliminated, that the words read "excess or surplus."

This might be interesting to you, a memorandum I picked up this morning as I was leaving the office, that came in among other reports. This is a report from the State of Washington. The number of organizations in the State of Washington is 30, two of them exceeded 90 per cent attendance, one-half of the remainder exceeded 70 per cent of attendance, and only two organizations fell below 60 per cent of attendance at armory drill during the winter.

Senator WADSWORTH. That would indicate a pretty good average of discipline and enthusiasm.

General RICKARDS. Indeed it would. I have been making my estimates on a percentage of 66 per cent of attendance at armory drill, and here is one that is showing close on to 75 per cent.

Senator LENROOT. Can you tell us the average strength of regiments as compared to war strength now?

General RICKARDS. Yes; just about one-half; 50 per cent.

Senator WADSWORTH. That is of war strength?

General RICKARDS. Yes.

Senator WADSWORTH. It is the policy of the War Department, is it not, in establishing peace strength to have about from one-half to two-thirds of war strength?

General RICKARDS. Yes.

Senator WADSWORTH. Varying with the different branches?

General RICKARDS. Yes.

Colonel WELLS. An enlisted company war strength is 200 men, and peace strength 93. I think it is a little higher in Field Artillery.

Senator WADSWORTH. You think the guard is getting on pretty well?

General RICKARDS. Fine, sir. All we want is money.

(Whereupon, the committee adjourned until Monday morning, April 17, 1922, at 10.30 o'clock.)

WAR DEPARTMENT APPROPRIATION BILL, 1923.

MONDAY, APRIL 17, 1923.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10.30 o'clock a. m.

Present: Senators Wadsworth (chairman), Lenroot, Spencer, and Harris.

The following members of the legislative committee of the National Guard Association were present:

Brig. Gen. Edward L. Logan, *Massachusetts.*

Maj. Gen. M. J. Forman, *Illinois.*

Maj. Gen. William G. Price, *Pennsylvania.*

Brig. Gen. D. Smith, *Indiana.*

Brig. Gen. W. A. Raupp, *Missouri.*

Brig. Gen. Franklin W. Ward, *New York.*

Brig. Gen. Mortimer L. Bryant, *New York.*

Col. J. W. Meyers, *New York.*

Maj. H. D. Cummings, *Massachusetts*, secretary.

The following States were represented by their adjutant generals in person: Alabama, Adjt. Gen. H. A. Moon; Indiana, Adjutant General Smith; Maryland, Adjutant General Reckord; Missouri, Adjutant General Raupp; Massachusetts, Adjutant General Logan; New York, Adjutant General Ward; Pennsylvania, Adjutant General Price; Wisconsin, Adjutant General Holloway; South Carolina, Adjutant General Grant; Texas, Adjutant General Barton; District of Columbia, Adjutant General LaGarde; Michigan, Adjutant General Biercy; Ohio, Adjutant General Florence; West Virginia, Adjutant General Chainick; Vermont, Adjutant General Johnson; North Carolina, Adjutant General Mitts; New Hampshire, Adjutant General Honaid; Georgia, Adjutant General Nash.

The following States appeared by proxy: Massachusetts, Kansas, Georgia, New York, Pennsylvania, Utah, Colorado, California, Washington, Oregon, Montana, and Idaho.

STATEMENT OF BRIG. GEN. MILTON A. RECKORD, ADJUTANT GENERAL OF MARYLAND.

Senator WADSWORTH. General Reckord, we shall be glad to hear you. The items under consideration are the Militia Bureau items. We will begin at the bottom of page 79 of the bill.

MILITIA BUREAU.

General RECKORD. Senator Wadsworth and gentlemen: I should like to say that our only thought in being present here to-day is to bring to the attention of the gentlemen of this committee the fact that we realize that the recent cuts that have been made over in the House in the appropriations as they affect the National Guard are such that the plans outlined, in which we all believe, can not be carried out. There is absolutely no thought of politics. There has been no call from the Militia Bureau or the War Department to assist in this work at all. It all comes about and we are here merely because we believe the interests of the National Guard warrant us in being here. I should like to call the attention of the gentlemen of the committee to the fact that the National Guard is an absolute unit, and as I speak this morning I can say without hesitation that I am speaking not only for the adjutant generals of the several States but for the National Guard of the United States as a whole.

Senator SPENCER. Will you state for the record how many adjutant generals there are here, probably?

General RECKORD. The adjutant generals of 16 States are present, and I hold in my hand a number of telegrams—one which I feel I should call to the attention of the committee from the Ninth Corps Area, General Boree of California. The notice was quite short, as I think Senator Wadsworth will agree, and General Boree could not get here, but he wired a proxy not only for his own State but for the States of the Ninth Corps Area. All other corps areas are represented in person.

PROCUREMENT OF FORAGE, BEDDING, ETC.

I merely bring that out to show that we are an absolute unit with respect to the appropriations which are the subject for this discussion. I have discussed this matter with practically all the gentlemen present, and also with the Chief of the Militia Bureau, and we have decided to pay no attention to certain items in this bill, but to confine all of our remarks and all of our efforts to five items. Of those five items, the first is for forage, bedding, etc., for animals. I shall be glad to take up the items in order, Senator.

Senator WADSWORTH. That will be satisfactory.

General RECKORD. The House bill provides \$1,002,800. We request you gentlemen to raise that to \$1,948,000.

Senator SPENCER. Do you not mean \$1,928,000, General, the amount of the estimate?

General RECKORD. My figures are \$1,948,000, sir.

Senator LENROOT. You are correct. There is a supplemental estimate.

General RECKORD. Yes, sir. We arrive at that in this way: There are 8,000 animals already allotted to the National Guard, and the cost is approximately \$200 per year, or \$1,600,000.

Senator LENROOT. You have now 8,000 animals?

General RECKORD. Yes, sir.

Senator LENROOT. And they cost you how much?

General RECKORD. Approximately \$200 per year.

In that connection, I should like to call attention to the fact that there are many Artillery and Cavalry units already allocated to the States, raised by the States, presented to the Federal Government, and accepted by the Federal Government, which units have no animals. The animals have not been sent to the States for two reasons, probably—one that the animals were not available; another that they had no transportation funds; and, third, that they had no money with which to purchase forage. Speaking of my own State, we have in one Artillery battalion three batteries, two of which have animals. The third battery has been accepted in every respect by the Federal Government, but they could not give us any animals because they had no money with which to feed them, and I was told officially by the Chief of the Militia Bureau that if I would agree on the part of the State to feed those animals from now until the end of June, the end of this fiscal year, we could have the animals. This item will enable us to have animals for those units which have been federally recognized.

Senator LENROOT. Are those units confined to batteries, or is there any Cavalry among them?

General RECKORD. There is some Cavalry and some Artillery.

Senator LENROOT. Have you Cavalry under your command?

General RECKORD. No, sir; I have not.

Senator LENROOT. Senator Wadsworth, have we information as to the division between Cavalry and Artillery?

Senator WADSWORTH. I think not.

Senator LENROOT. I think we would like it at some time during the hearings.

Senator WADSWORTH. General Reckord, Senator Lenroot is asking whether you have information as to the number thus far allotted to Artillery and also allotted to Cavalry, so as to distinguish between the two.

General RECKORD. No, sir; I have not, Senator.

Senator WADSWORTH. We probably will have to get that information from the Militia Bureau.

General RECKORD. Yes, sir. I should like to say, however, that in some States a lot of work has been done, based upon the allocation of the units by the Federal authorities to those States.

For instance, I happen to know that in Alabama the enlisted men, as well as the officers, in three troops and two batteries have agreed to set aside, and they have been doing so for some time, the pay which they received from one drill night per month in order properly to house the animals of the Federal Government. The State has not provided in some of the States for proper housing of these animals, as they have in some of the larger States, like New York and Pennsylvania and some of the New England States.

In the Middle Western States it is even a little different. In Minnesota, I think, one of the large cities has already entered into a contract to build a large armory stable to house the horses which are necessary for the artillery that is allocated to that city. The Federal Government has entered into a contract with the State. The State has accepted that allocation of the artillery, and the State then has entered into an agreement with the city authorities, and altogether they are building to care for these animals, although,

if we fail to get this appropriation through, the Federal Government will be precluded from sending any animals, and all this work will be done for naught; and you can certainly realize what a bad effect it will have upon the people of that particular community.

That applies not only in Minnesota but in Texas, Indiana, Michigan, Missouri, and Alabama. They are just some States of which I happen to have personal knowledge. For that reason we do not hesitate to ask, and, if you will permit us, even to insist that that item be raised to \$1,948,000.

Senator WADSWORTH. You say you have 8,000 animals now actually in the hands of the guard?

General RECKORD. Yes, sir; eight thousand and a few over.

Senator WADSWORTH. How many more will be necessary in order to take care of the mounted units which have been accepted?

General RECKORD. Seventeen hundred and forty. Those figures are given me by the Militia Bureau, Senator; and if we secure the \$1,948,000 for which we ask, we shall be able to take care of them.

Are there any other questions on that item?

Senator LENROOT. That number of 1,740 additional animals covers both Cavalry and Artillery?

General RECKORD. Yes, sir.

Senator WADSWORTH. It covers really a little more than that, does it not? Are there not some other units that have animals?

General RECKORD. Properly equipped National Guard units already recognized require an additional issue of 1,740—the units already recognized.

Senator WADSWORTH. There are units, are there not, other than Artillery and Cavalry, which receive horses?

General RECKORD. There may be a few, but they would be very minor.

General LOGAN of Massachusetts. Engineer regiments do not receive any of these horses. We need them in Massachusetts, but we have not had them yet.

General RECKORD. There are machine-gun units, and things of that kind, but they are very few.

Senator WADSWORTH. Would they all be covered by 1,740?

General RECKORD. They would all be covered by 1,740.

Senator LENROOT. Referring to the batteries that are in existence and do not have horses, how do they drill; how do they get along?

General RECKORD. In Maryland, sir, we have arranged for that battery to use the horses of the other battery, temporarily. I presume that is being done in other States where that can be done. Otherwise, I see no other way than that in certain months the horses would have to be loaned to the batteries that have no horses.

Senator LENROOT. You have two batteries in Maryland?

General RECKORD. We have three now, sir; two with horses and one without.

Senator HARRIS. General, will you please tell me how that works, as I am not as familiar with this as I should like to be? Do you have for each battery a certain number of horses?

General RECKORD. Yes, sir.

Senator HARRIS. How often do you use those horses?

General RECKORD. They are used every week, and some of these horses are used every day in the week. You see, Artillery is no good

unless the men know how to ride, and the same way with Cavalry. I speak for Maryland only. We have a regular schedule worked out. Every man who is in Class A has the right to come out to the armory whenever he has time, other than the drill night, and learn to ride, and those horses are used practically all the time. Then, on the drill night, of course, the teams are worked out as teams to the guns and caissons.

Senator HARRIS. You drill once a week, regularly?

General RECKORD. Yes, sir.

Senator HARRIS. And you have been using them to take care of the different batteries?

General RECKORD. Yes, sir.

Senator HARRIS. How has that worked, General?

General RECKORD. Divided responsibility never works just as we would like it to work. For instance, if a man of one battery borrows a horse from another, and anything gets wrong with that horse, it is always the fault of the man who borrowed it. It is not good business at all.

Senator HARRIS. How many horses are there to a battery?

General RECKORD. Thirty-two. Of course, that is a very greatly reduced number, you see.

Senator LENROOT. What is the enlisted personnel?

General RECKORD. The enlisted personnel of a battery is about 125.

Senator LENROOT. There are 32 horses required to mount the battery?

General RECKORD. Only 32 horses are allowed us by the Federal Government for each battery. You see, they have cut down the number to the very minimum. In addition, if we should fail to get this appropriation and thereby should be compelled to have the horses of one battery used by maybe two batteries or maybe three or four batteries, you can very readily see that it is not sufficient, and it will be very poor business.

Senator WADSWORTH. You can not interchange horses between batteries unless the batteries happen to be in the same town?

General RECKORD. No, sir; you positively can not. It just happens that in Maryland the whole battalion is under one roof. It is an ideal situation. It is just one big plant.

Senator SPENCER. In most States where they have more than one battery, are they located in the same city or are they located in different cities?

General RECKORD. It differs, Senator; in some States the batteries are in small towns, and there is only one battery in each town.

Senator SPENCER. General, have we more than one battery in Missouri?

Gen. W. A. RAUPP, of Missouri. Yes, sir; we have them scattered in five different places in the State.

Senator SPENCER. Of course, you could not exchange horses there?

General RECKORD. It is absolutely impossible to do it with any degree of efficiency.

Senator WADSWORTH. Speaking of the 32 horses per battery, it is a fact, is it not, that in a great many instances either the State or the members of the battery secure additional horses?

General RECKORD. Quite often; yes, sir.

Senator WADSWORTH. To supplement the 32 furnished by the Federal Government?

General RECKORD. Yes, sir; in fact, it was suggested to Maryland that we either buy horses for this other battery or agree to furnish the feed for the horses which the Federal Government would send for the third battery; and I had to reply that the funds of the State of Maryland were such that they would take care of the needs as indicated when the appropriation was made, but that that was not contemplated, and we had no funds with which we could possibly do that, even if we had the inclination.

Senator WADSWORTH. Senator Lenroot and other Senators, do any of you care to ask questions about the Cavalry of the guard? It occurs to me that you might be interested in asking General Bryant, of the One hundred and first Cavalry, about the Cavalry interests. He happens to be here. Do you mind being interrupted just at this point, General Reckord?

General RECKORD. I should be delighted to have you hear him, because he is a Cavalry man, and he could answer those questions. I think, to the satisfaction of everybody here.

NEED OF ADDITIONAL HORSES.

STATEMENT OF BRIG. GEN. MORTIMER L. BRYANT, OF NEW YORK.

General BRYANT. Mr. Chairman, I think I can throw some light on the situation in regard to the mounted organizations. For New York State I think we have more mounted organizations than any other State. That includes the Cavalry and the Artillery; and the remarks in regard to cavalry apply to artillery except changing the word "platoon" to "section," etc. I will confine my remarks to cavalry. I think the point raised by the Senator is to get an idea of what these horses do, how necessary they are to the development.

A troop of cavalry consists of 96 men. We have 32 horses. That means that each horse has to accept the riding of at least three riders, and they ride once a week. Now, if they do no more work than that—and every troop of cavalry does—they double up, so that each horse is working six days out of seven. That applies to Cavalry and Artillery.

Senator HARRIS. How long do they work each day, General?

General BRYANT. They work about two hours and a half a day. In some places in New York where we have several troops we can make rapid progress in the training of men, because we can interchange the use of horses and mount every man in a troop. In the troops that are separated and where they have to use only 32 horses, they can only mount a platoon, and while one platoon is doing mounted work the other platoon has to do dismounted work. Therefore their riding, care of animals, and instruction progresses less rapidly than it does at points where we can consolidate the horses.

We have both situations in New York State. We have one complete regiment of Cavalry with five troops in Brooklyn, and there is a troop in Buffalo, one in Rochester, one in Syracuse, one in Geneseo, and so down at Albany and Utica, and we have one over on Staten Island. We have been able, by a great amount of effort extending

over a long time, to accumulate other horses to assist in the situation. In some troops we have a horse for every man. It will be impossible for us to continue that, in my opinion, if the Government withdraws the support of one-third of that work. We shall have to drop back to about a 50 per cent basis.

I think the main point to bring out is the necessity for 32 horses per battery. In Brooklyn we have to interchange our horses to keep them in condition, because we work them there more than at any other place, for the reason that we have not the opportunity to have the private horses that they have in other places throughout the State. If the Government support of one-third of the horses necessary to completely mount a unit is reduced, it will reduce the progress of development of the guard. We can turn out a pretty good cavalryman or a pretty good artilleryman in a year under our present system. If the horses are reduced, it will reduce the progress of the guard just that much. It will take two years to do what we are doing now in one year.

I shall be glad to answer any questions that I can.

Senator SPENCER. General, my recollection was that General Rickards expressed the opinion that it was very desirable too keep the Cavalry which had now been allocated and which would exist, but that as a matter of policy he doubted very much whether it was wise to increase the Cavalry units at all. Would that be your judgment?

General BRYANT. Yes, sir.

Senator WADSWORTH. You think we have enough Cavalry?

General BRYANT. I do not know how it is outside of New York, but as a matter of economy, which we are all considering now, I think that the Cavalry situation is complete in the National Guard in some of the States. There are four divisions, I believe, of National Guard Cavalry, and I think they have all been allocated, and if they are complete that serves the purpose.

Senator HARRIS. Is the number of Cavalry units in the National Guard relatively about the same as the number of Cavalry units in the Regular Army?

General BRYANT. I think there are more in the Regular Service. There are four divisions.

Senator WADSWORTH. Do the units correspond to the units of the Regular Army?

General BRYANT. In size?

Senator HARRIS. Yes.

General BRYANT. Yes, sir.

Senator LENROOT. Do you know whether any Cavalry regiments or units have been accepted that have not been provided with horses at all?

General BRYANT. Not in New York State.

Senator LENROOT. Would you expect to get any of these 1,740 horses for the Cavalry if provision were made for them?

General BRYANT. No, sir.

Senator LENROOT. They would all go to Artillery?

General BRYANT. We have 15 troops in New York State, and they have all their horses.

Senator LENROOT. I mean, do you know whether the Cavalry of the guard would expect to get any of these 1,740 additional horses?

General BRYANT. Oh, yes, sir; lots of them.

Senator LENROOT. Do you know how many?

General BRYANT. No, sir; I am not familiar with the details. General Rickards can probably answer that.

Senator SPENCER. What about Cavalry in Missouri?

General RAUPP of Missouri. We have none.

Senator SPENCER. You do not expect to have any?

General RAUPP. No, sir.

STATEMENT OF BRIG. GEN. MILTON A. RECKORD—Resumed.

General RECKORD. I might state just a word, Senator, if you will permit me, with respect to the fact that New York has cavalry, and Missouri has none, and Maryland has none. That allocation has all been worked out in the War Department on the general defensive plan, and the cavalry necessary to make the four divisions in the National Guard has been equitably distributed throughout the several States of the Union. Some States having infantry and artillery, and preferring that, have no cavalry; but every one of the units that go to make up the four divisions has been allocated to some State of the Union. Some of those States are not as far advanced as others in raising their units. New York, for instance, has all of the horses necessary for her cavalry units. That is explained by the fact that New York is a big State and went right ahead. In fact, I think the State law requires a certain number of thousand troops to be on duty there all the time, so that even when we were in France I think they had 10,000 troops in New York when in other States they had none. New York was in a position probably to get some of the first horses that were sent out when the reorganization began, but many of the other States in the South and in the Middle West were not ready, and therefore could not present the units, could not ask for the horses, and now they can not get the horses. That explains why some are equipped and some are not.

Senator LENROOT. Do you know, General, if these 1,740 horses are provided for, whether they can be secured from the Army?

General RECKORD. I think they can, sir; but I can not say "yes" positively. I am reasonably assured that they can be. In fact, I do not believe there is any doubt about that, Senator.

Senator WADSWORTH. That is on the question of the forage item.

COMPENSATION OF HELP FOR CARE OF MATÉRIEL, ANIMALS, AND EQUIPMENT.

General RECKORD. The second item, gentlemen, is the one for compensation of help for care of matériel, animals, and equipment. From the heading you will notice that that is very closely associated with the first item. The item covers caretakers for animals, caretakers for field artillery, and for motor equipment, and for airplanes.

The caretakers for the 8,000 animals now in the hands of the National Guard, together with the others for the proper care of the matériel, will require \$1,100,000. The House bill allows but \$750,000. In addition, if you grant our request in the first item and give us the 1,740 additional animals that we ask for in order to complete the equipment as to animals, we will require \$1,910,500.

Those two items are so closely allied that the arguments for one are really the arguments for the other.

Senator WADSWORTH. Will you explain to the committee the system of allotting caretakers at the expense of the Federal Government?

General RECKORD. Yes, sir.

In the artillery, each battery is allotted a number of men, or so much money, which may be divided among a greater number of men if those men can be secured by the State authorities at less per diem, and the same thing applies in the motor-drawn artillery, and in the case of the airplanes the same thing is supposed to obtain. That, however, has not been carried out by the Federal Government. I can cite one instance where equipment was shipped to a State, authority was granted to that State to hire the necessary caretakers, to be paid out of Federal funds, and after the equipment was all received and on the ground in the hands of the State—the State responsible for it and the men hired under the authority granted by the Federal Government—that authority was withdrawn and the State left high and dry with this equipment on its hands and no caretakers to be paid from Federal funds.

Senator HARRIS. General, can you tell us how much it costs a head for each animal that you keep?

General RECKORD. To keep each animal?

Senator HARRIS. Yes; approximately.

General RECKORD. I can tell you approximately; yes, sir.

Senator WADSWORTH. I think he said it cost \$200.

Senator HARRIS. That is for the feed, but this is for the care, as I understand—a different item.

General RECKORD. I should say from \$12 to \$13 per month is what it costs to care for animals and matériel. That is not all chargeable to animals. Take the artillery—very expensive guns and instruments and matériel—all that must be cared for, as well as the animals. That is all lumped. You see, the caretakers of a battery look after not only the horses but the matériel as well, so that I would not be able to give you a definite and direct answer to your question. It probably could be figured out to your satisfaction by some officer in the Militia Bureau, but no attempt has been made to segregate the expense between the two items of matériel and animals.

Senator WADSWORTH. How many caretakers are assigned to a battery of field artillery?

General RECKORD. Not to exceed five.

Senator WADSWORTH. What is their pay?

General RECKORD. \$90 a month.

Senator WADSWORTH. They find themselves?

General RECKORD. Yes, sir; \$90 covers everything. That is all they get. They must, as you say, find themselves.

Senator WADSWORTH. In most instances they are actually enlisted in the battery, are they not?

General RECKORD. They must be enlisted men of the battery or they can not be hired for that purpose.

Senator WADSWORTH. The same is true of a troop of Cavalry?

General RECKORD. Yes, sir.

Senator WADSWORTH. There are five caretakers to a troop, are there, or three?

General BRYANT. Three—not more than three.

General RECKORD. That will probably answer your question—that if there are three caretakers for the troop, then the two extra men would be caretakers for the matériel of the battery. I think you would probably assume that.

Senator HARRIS. There are three to a troop, you say. How many horses are there to a troop?

General RECKORD. Thirty-two, sir. There are the same number of horses in a troop that there are in a battery.

Senator HARRIS. That is a little less than \$10 a head?

General RECKORD. Yes, sir; considerably less than that, sir.

Senator HARRIS. That is \$270 for the three men?

General RECKORD. Yes; for 32 horses; that is right.

Senator WADSWORTH. General, it is a fact, is it not, that in addition to these Federally-paid caretakers, the States in many instances employ additional men in the armories?

General RECKORD. There is no doubt of that, sir. You see, these men paid as caretakers, are not armorers. The armorers are cared for in every respect at the expense of the respective States. The upkeep of the armories, the caretakers, the heat and light and janitors and all of that expense, is borne by the State, absolutely.

Senator WADSWORTH. Most of those men are enlisted men; are they not?

General RECKORD. Practically all of them. Now and then, in a large city armory, you will find two or three old men, who were formerly members of the unit, but who have been allowed to continue on by the State officials because of their former connection with the unit. They were members of the unit when they got their positions, we will say, as janitors or armorers, and then when they became too old to serve with the unit they had been allowed to continue in their positions; but they have all had actual connection with the National Guard units at some time.

Senator LENROOT. The cost to the Government is the same whether two, three, four, or five caretakers are employed?

General RECKORD. No, sir; not necessarily; but it would cost the Government the same if more than five were employed. For instance, five is as little as can care for a battery.

Senator LENROOT. Is not the same allowance made to each unit?

General RECKORD. No, sir; not unless they use them.

Senator LENROOT. I notice in the House testimony this testimony by Major Wilson, and I should like to have your explanation of it:

Major WILSON. The law prescribes there shall not be more than five caretakers for a unit of 32 horses. They may employ four or three men, according to their competency.

Mr. Sisson. In other words, whether it is divided among two or three men, the cost of caring for the horses would be identical as far as the Government is concerned?

Major WILSON. Exactly.

General RECKORD. I think he did not understand the question in that case. I shall be glad to explain that.

Senator LENROOT. Yes; I should like an explanation.

General RECKORD. As I understand, sir, the Federal Government will allow five men at \$90 a month, a total of \$450, and not to exceed that amount. If the State should elect to deal with those men and secure them for less than \$90 per month, they might hire as many

as seven or eight men, but in no instance would they be allowed to pay more than the total of \$450 and expect to be reimbursed by the Federal Government. Anything over \$450 would have to be paid by the State; but if they hire only three men, my understanding is that three men would be paid, but they could not be paid \$450.

Senator LENROOT. Then you think the allotment is not made to the unit of so much for care?

General RECKORD. I feel positive that that is not the case, sir.

Senator LENROOT. Is there anyone here who can clear that up right now? It is quite important.

Senator WADSWORTH. Perhaps it would be well to put the question to the gathering.

Senator LENROOT. Yes.

Senator WADSWORTH. Is there any officer here who can definitely answer Senator Lenroot's question? Assuming that the State, for example, in the case of a battery of Field Artillery, instead of employing five men employs only four, can the State draw the \$450?

Colonel MEYERS, of New York. Yes, sir. The point about that is this: The allowance of \$450 in one case and \$375 in the other to Artillery or to Cavalry is made for the reason that in many instances you can not employ the full strength of the men allowed for the amount allowed. In other words, if you wanted to employ five men for \$450 you might not be able to secure them, particularly in the case of mechanics, where you might have to pay one man \$125 a month and another man \$90. Therefore the allowance is made for the full amount, and you can employ for that amount not to exceed five men.

In many instances when labor was much higher than it is now we could only get three men in a State for \$375. In other words, they were getting \$125 a month each. As the scale of labor has gone down we are able to secure ordinary labor, hostlers, and that sort of thing, for \$90 a month, but the mechanic who takes charge of the highly organized machinery of Motor Artillery and Field Artillery can get \$125 a month and sometimes \$150. Therefore it is up to the battery or troop commander so to organize his \$450 as to get the best results in the care of his equipment or animals. That is the situation, sir. He gets the \$450, but he must expend it. Where three or four troops of Cavalry are under one roof he does not get as much money, because they are supposed to split up their help among all the troops. You will find that covered in the National Guard regulations. In other words, where Colonel Bryant has five troops in Brooklyn he is not allowed so many people, but if he had those troops in separate towns he would be allowed more people, the idea being that the combined labor can take care of more matériel and more animals than in the case of a special organization.

Senator LENROOT. Let me understand you. Do I understand that where there are, say, five troops they do not get five times the allotment to one troop?

Colonel MEYERS. No, sir; they do not.

Senator LENROOT. What is the basis of determination?

Colonel MEYERS. That is determined by a regulation in the National Guard regulations, arrived at on the basis, we will say, that a man can take care of 10 horses in one case, and in another case he has to take care of 11 horses; or, if he has three batteries of Artillery

in one place, he can take care of a few more guns. They slip one over on him, in other words.

Senator LENROOT. But there is a standard adopted, for instance, so that if there are three troops together they will allow those three troops so much money?

Colonel MEYERS. Yes, sir.

Senator LENROOT. And if there is one they allow them the full amount?

Colonel MEYERS. Yes, sir.

Senator LENROOT. It is all allotted to the units?

Colonel MEYERS. Yes, sir.

General BRYANT. In the case of Brooklyn, my recollection is that one troop gets the full allowance, \$375, and the other troops get \$250.

Senator LENROOT. I should like to ask the General, then, if we were getting this done with three men when the wages were high, why does it require five men to do it now when they are low?

Senator WADSWORTH. Five for Artillery; three for Cavalry.

Senator LENROOT. No; but if the work was being done with three when wages were high, why is it that they are now employing five?

Colonel MEYERS. I can tell you about that.

Senator LENROOT. Yes; I should like to know.

Colonel MEYERS. The State or the battery or the troop provides the rest of the help, sir.

Senator LENROOT. So the Federal Government now is contributing a larger proportion with the lower wages than it was contributing with the higher wages?

Colonel MEYERS. No; they are not contributing any more, sir. They are getting more people out of it, but the State or the troop has to make up the difference. In most cases the organization had to make it up, because there were no State appropriations to apply to that purpose.

Senator LENROOT. My question was, with these low wages, the Federal Government is contributing a higher percentage of the cost than it was with the high wages? That must be true.

General RECKORD. I think the answer to your question is in the affirmative, undoubtedly.

Senator LENROOT. Yes; I think so. It is obvious. I was not saying that by way of criticism. I was stating a fact.

General RECKORD. No; but the fact is that the Federal Government is being asked to pay no more in dollars and cents now.

Are there any other questions on that item?

Senator SPENCER. General, I want to ask one question. You now have seven air squadrons of the National Guard; do you not?

General RECKORD. Yes, sir.

Senator SPENCER. My recollection is that the policy of the Militia Bureau was to make as fair an experiment with those seven as was possible.

General RECKORD. That is correct, sir.

Senator SPENCER. But not to increase them at all until the experiment had been definitely determined.

General RECKORD. Yes, sir.

Senator SPENCER. That meets with your approval? I mean, that is the concensus of opinion?

General RECKORD. I think that is good policy, sir; but when you ask if that meets with my approval, I should have to qualify that a little, meaning only to intimate that I am thoroughly "sold" on the 18 National Guard division proposition; and if an air unit is necessary in order that a division can function properly in time of war, then I think it should be maintained in the National Guard. But I do believe that we should experiment on the seven that we now have and see just what their cost is going to be to the Federal Government before we go on into the number necessary to complete one for each division. Yes, sir; I am in accord with that; and my State happens to have one of those seven air units.

Senator LENROOT. General, you are asking for a greater proportionate increase for compensation of help than you are for forage. Can you explain why that is?

General RECKORD. Yes, Senator. That is caused by the fact that the heavy artillery is motorized, and the air unit requires caretakers who are mechanics.

Senator LENROOT. Yes; but this can not be used for motorized units.

General RECKORD. What is that, sir?

Senator LENROOT. This appropriation can not be used for motorized units.

General RECKORD. Oh, yes, sir; it covers the whole thing, Senator.

Senator LENROOT. No; I beg your pardon. I do not pretend to know much about this except as I happen to get some things here in the testimony, but Major Wilson testified before the House that the \$1,300,000 for the current was not all used—

for the reason that under the comptroller's decision we had to cease employing caretakers and mechanics for organizations other than horse drawn, so that we had to shut them off.

General RECKORD. That is correct, sir. We did have to shut them off, but since that time there has been an act of Congress passed.

Senator LENROOT. Oh, you have had legislation?

General RECKORD. Yes, sir.

Senator LENROOT. I beg your pardon.

General RECKORD. I cited an instance just a moment ago where that authority had been granted to a State, the equipment had been received by the State, and the authority was then withdrawn, leaving the State to hold the bag. The State has since had to pay those caretakers, but since that time another act of Congress has corrected that deficiency.

Senator WADSWORTH. What is your next item, General?

CAMPS OF INSTRUCTION.

General RECKORD. The next item is the one covering expense camps of construction.

Gentlemen, if one item is any more important than another, I think this is the important item. If you will bear with me just a moment, I am going to go into a few figures on this.

The present strength of the National Guard is 148,000, approximately, and we believe by the end of June, 1922, it will reach 160,000, and by the end of the coming camp season, which will carry us well into the month of September, it will reach 175,000. Based on the experience of previous years, we figure about 90 per cent attendance at camp. That would mean that we must care for approximately

68,000 men in the summer training camps this year, and in order to do that it would take \$9,000,000. Now, I realize \$9,000,000 is a lot of money, but if the National Guard is worth anything at all and is to be an efficient organization and able to take up a defensive position in time of emergency, we must have this field training, and if we have a field training of less than 15 days, I can not say it would be worthless, because some good would be gotten out of it, but assuming that it would be cut one-third, to 10 days, very, very little good, comparatively speaking, would be gotten out of it.

Anywhere from two to four days, and in a big State like Texas even a greater period of time than four days is consumed in traveling to and from camp. Of course, Texas is our largest State, but in the smaller States two days at least would be consumed in traveling, cutting the instruction period down to eight days, and Sunday comes in there, making it seven days. You could not possibly get over seven days' instruction, and in seven days you do not much more than get straightened out, so to speak. So if you figure that to get these men to that camp and home from that camp for a seven-day period it costs you absolutely the same amount as it would cost if you took them to camp for 15 days. It looks to me as though we would be making a dreadful and flagrant mistake to cut this particular item. I do not think we can possibly agree to cut that item one dollar. Fifteen days, I think, is the minimum. And I might say, I think, for the entire National Guard, that we are all of one accord when it comes to that item.

Senator HARRIS. You favor 15 days?

General RECKORD. Fifteen days' camp. And the national defense act really requires a 15-day camp, and I do not speak because that law requires, because I know the requirements of the law are dependent upon appropriation, but I speak because of the efficiency of the National Guard. Seven days is not sufficient; 15 days is little enough. And I have heard a rumor, gentlemen—I stand to be corrected if I am wrong, but I have heard a rumor, and the figures here seem to bear the rumor out, that the House committee inadvertently took the figures in this item as the figures for the armory drill pay.

Now, the average attendance at the armory drill is 66 $\frac{2}{3}$ per cent—about two-thirds. The average attendance of the men who receive pay for armory drill is about two-thirds, and the average attendance of the men in the encampments, instruction camps, is 90 per cent—not over 90, but it was eighty-nine and some tenths per cent—90 per cent approximately. So, if you look at these figures the cut indicates a one-third cut, and I am told that the House made that error and acted on these figures assuming they applied to the armory drill pay, in which case they would have been cutting just one-third.

This item can not stand a cut. And in addition to the 15-day encampment there is a 4-day training period for officers and noncommissioned officers, which takes \$200,000, and the rifle competitions, which take about \$300,000.

Now, gentlemen, the National Guard can not afford to lose either one of those three items. It can not afford to lose the 15-day camp, and the four days' school is a vital thing, because at that school, which is usually held just prior to the camp, the questions that are

coming up in the camp are discussed and studied, and the four-day camp is worth every cent that is being asked for it.

Then, when you come to the third item, which is rifle competition and rifle instruction, as you all know, if we do not learn how to shoot the rifle we are not much good as soldiers, and this rifle competition warrants our interest and warrants our support, and I sincerely trust the committee will see fit to raise this item to the amount we ask, which is \$9,500,000.

Senator HARRIS. General, you count that 10 days, or 15 days counting the time going and returning, would enable you to give double the training practically in 15 days that you would in 10 days.

General RECKORD. Practically, Senator.

Senator HARRIS. And then the expense would be relatively much smaller for 15 days than for 10 days.

General RECKORD. The expense would be relatively much smaller, because the transportation, which is a big item, is exactly the same in either case.

Senator HARRIS. So you get double the training for practically the same amount of expense.

General RECKORD. Not quite so, but almost double for the identical number of dollars and cents for the transportation item.

Senator HARRIS. And \$9,000,000 will give you the 15 days' camp?

General RECKORD. \$9,000,000 will give us the 15-day camp, and \$200,000 will give the 4-day camp of instruction, and \$300,000 will give us the rifle practice.

Senator LENROOT. What did we have last year, 15 days?

General RECKORD. Yes, sir.

Senator LENROOT. How long have we had 15 days?

General RECKORD. I do not believe I am qualified to answer, Senator.

General LOGAN. Since just before the war.

Senator LENROOT. It used to be seven days, did it not?

General LOGAN. It used to be four days, and then seven and then eight.

Senator LENROOT. I see there will be a balance this year of about \$200,000 unexpended out of an appropriation of \$6,000,000.

General RECKORD. In that item, you mean, sir?

Senator LENROOT. Yes; has that been taken into consideration?

General RECKORD. I do not think so. I do not believe that item would carry over into this year.

Senator LENROOT. It would not; no, sir. I mean only on the basis of increased cost.

General RECKORD. A much larger guard, Senator. The National Guard, you see, has been growing steadily, and these figures we are now discussing would have no bearing on that amount which is left over.

Senator LENROOT. Not at all, except we have trained 114,000 men it appears this last year for \$6,300,000. Now, is that on the same basis that your additional amount is asked by reason of the increased growth?

General RECKORD. Practically the same basis. The cost per man, I think, is \$56.25, \$56, practically.

Senator WADSWORTH. Will you explain to the committee the regulations and requirements imposed on the guard in the matter of rifle practice?

General RECKORD. Well, the regulations, Senator, are to the effect that all men must qualify, and we have in each State certain rifle ranges which are open and part of the expense to be borne by the Federal Government during such period as they authorize that range to be open, and these troops are sent to the range for rifle practice.

Then, we have competitions, and you will all recall the national matches at Camp Perry, where the best shots of the several States meet, the Army and the marines and the Navy as well, and in that way the interest in rifle shooting is kept up from year to year.

Last year, it will probably be of interest to the committee to know, if they do not already know it, for the first time in the history of the country our rifle team won the international matches and took the first place away from Switzerland for the first time that it has ever been done in this country. Now, for the little cost, we certainly do not want to be precluded from trying to hold that position which we have at last gained in rifle shooting. Interest must be maintained, and the only way to maintain it is to appropriate the necessary funds.

Senator HARRIS. General, how many men take part in the national rifle matches?

General RECKORD. Very few take part, comparatively speaking, in the national matches, but it is a progressive competition. The men in the States compete at their State ranges, and the best of those are picked for the State team, and they go to Perry and compete with the best from other States. Every man, Senator, is supposed to shoot on the range and try to qualify each year.

Senator WADSWORTH. It is the custom or regulation, is it not, that each unit, such as a company of infantry, shall go to the range in a body for at least a day each year?

General RECKORD. Oh, yes; and perhaps four days in camp, four days of the twelve are used for rifle practice.

Senator LENROOT. How many men do you estimate, General, there will be in the guard of the training period.

General RECKORD. I estimate 175,000 up to the end of September, and a few of those will come in just a little too late probably to get into the camp, but 160,000 roughly will attend.

Senator LENROOT. Ninety per cent?

General RECKORD. Yes, sir.

Senator LENROOT. The Budget estimate was on the basis of 142,000. You think that will be increased to 160,000?

General RECKORD. I think, figuring by the gradual rate of increase, that is about right, sir. These figures have been checked with the Militia Bureau figures also, and they agree with these figures.

Senator LENROOT. The Militia Bureau is revising its figures.

General RECKORD. Yes, sir.

Senator WADSWORTH. Any more questions on that item? What is the next one, General?

PAY OF PROPERTY AND DISBURSING OFFICERS FOR THE UNITED STATES.

General RECKORD. The next item is a small one, but a very important one, for pay of property and disbursing officers of the United States. We ask that that be raised from \$55,000 to \$75,000.

For the benefit of the committee, I want to say that the National Guard regulations provide that the United States property and disbursing officer in each State shall receive a certain amount of money per year as salary based upon the number of troops in that State. That is the regulation, but the lack of appropriation has compelled the Militia Bureau to violate its own regulation, and the consequence is that the States in many instances, in order to get men to do this work at a proper salary, have had to add from State funds to what the Federal Government pays for the purpose sufficient money in order to keep good men, men who are qualified on that job.

Senator WADSWORTH. What are the functions of the property and disbursing officer?

General RECKORD. The functions of the property and disbursing officer are to make up requisitions for Federal property required by the State, and to receive and check and be responsible for all that property when it is sent to the State. It is a very responsible office, and needs men who are careful and efficient, because the responsibility is great.

Senator WADSWORTH. Does he pay the troops?

General RECKORD. Well, he may pay them. In some instances, I think he does. He pays them in the field. I thought you meant for armory drill pay. He pays in the field in every instance, and he can not pay armory drill pay yet, but there is a bill which has passed the Senate and is now out of the House Committee on Military Affairs that favorably reported it, which will enable him also to pay armory drill pay if it is passed.

Senator WADSWORTH. He is really the paymaster of the guard in the State?

General RECKORD. Not only the paymaster, but he is the custodian of all the equipment, and when you consider the value of that equipment, it runs into millions of dollars.

Now, the total estimate here is \$75,000 with which to pay those men. In many States—I might say in every State they are insufficiently paid right now, and in many States they are not paid the amount the Militia Bureau regulation requires be paid them because of lack of funds.

Senator WADSWORTH. How is that pay calculated?

General RECKORD. It is calculated on the number of men. Not being a United States property and disbursing officer, I do not know right now.

General MYERS. It starts on the basis of \$500 a year for so many troops and increases as the troops in the State increase. If the number of troops decreases the disbursing officers' salary decreases.

Senator WADSWORTH. How does that run in dollars and cents?

General MYERS. It runs \$500 for no troops and goes up on the basis—in the State of New York, for instance, 22,000, he should receive \$3,250; but, owing to lack of appropriations, he only gets \$3,000. In other words, there is not enough money to go around, and

I might supplement the general's remarks for a second to say that the United States property and disbursing officer is responsible for every bit of property that goes in the State. He is the liaison officer between the State and the War Department. We have probably \$28,000,000 worth of Government property in our State under the United States property and disbursing officer, in addition to which the surveys, the issuance of such property, the disposition of it to the units, the care of it in storehouses, is under his control; the payment of troops in the field, the payment of all caretakers, and everything of that kind is under his control. I believe I handle close to a million dollars in my State, and I am under a \$40,000 bond. Last year we had something like \$350,000 at a time to our credit.

I hate to speak on this subject, because it might appear I am materially interested in the thing, but that has nothing to do with the case. In New York State we are obliged to help out very seriously on this job with clerks at the State expense, because no one mortal man can handle it.

In the case of pay of troops in the field, at one time, three years ago, I was supposed to be in five places on the same day to pay troops. We have to delegate officers for such purpose, which officers are not under bond, and the United States property and disbursing officer has to take the risk. It is not so bad in New York State possibly as it is in a number of other States. We practically do a business that any department store would do, \$15,000,000, without handling the cash. That is about the only difference there is.

As I understand it, this does not increase the pay of the property and disbursing officer, but simply brings it up to the present regulation.

Senator SPENCER. What is the rate of compensation over \$500 minimum and to what maximum?

General MYERS. It goes up finally to \$3,500, and that has to be for over 25,000 troops. There is nothing beyond that at all.

In Maryland we have a property and disbursing officer who works for \$750 a year. It happens to be a man who has means and has been in the National Guard and for that reason he is willing to do it, but that is not good business. He should not be required to do it. He should be paid the proper amount.

Senator WADSWORTH. How are the property and disbursing officers appointed.

General RECKORD. They are appointed by the governor of the State with the authority of the Militia Bureau.

Senator WADSWORTH. Is it not a fact formerly the adjutant general of a State in several instances was the disbursing officer?

General RECKORD. Yes, sir; he is that right now, but the governor practically solves that question. The adjutant general may be the United States property and disbursing officer, but in a large State it would be physically impossible for him to handle both offices.

Senator HARRIS. In how many States is the adjutant general the United States property and disbursing officer?

General RECKORD. I could not answer that. I think in a very few States. There are a number of adjutant generals present themselves, and they can all speak for themselves. I do not know of a single instance of my own knowledge.

Senator HARRIS. They are pretty busy men in my State.

General BARTON. There is one, I think, in Florida, but I am not sure of that. It would be impossible in Texas; I know that.

General RECKORD. This is a small item, gentlemen. It is \$25,000 to bring it up to the required amount. For that reason I hope you will see fit to add that.

Senator HARRIS. Does the disbursing officer have to pay for his own bond?

General RECKORD. Usually in the State that is paid from militia funds.

Senator WADSWORTH. From State funds?

General RECKORD. Yes; State militia funds.

Senator WADSWORTH. What is the next item?

TRAVEL OF OFFICERS AND NONCOMMISSIONED OFFICERS.

General RECKORD. The final item is one covering the travel of officers and noncommissioned officers of the Regular Army in connection with the National Guard. This item we ask that you raise from \$200,000 to \$500,000.

Supporting that item I would like to say that in a good many instances throughout the present fiscal year, the States have been called upon in order to get Regular Army instructors to pay the transportation of those officers and their families and of everything they took from the station to the new station within the State. In other words, the officers were available, but because of lack of appropriation they could not be obtained by the State unless the State would agree to pay the transportation. That has been done in many instances. In other instances, after having gotten the Army officers there as instructors, there have been no Federal funds with which to send the officer around to the units which he was supposed to instruct, and again the States have been called upon to supply the necessary transportation and hotel accommodations for those officers in order to get the benefit from the officers.

It is an important matter. The officers come to the States as instructors and you can not let them sit down in some city or town and write letters and never go to see these units they are supposed to instruct, and all we propose here is that you make available sufficient funds to enable us to use those instructors in an efficient and capable manner.

Senator WADSWORTH. Do you have enough instructors now?

General RECKORD. Throughout the National Guard as a whole I would say no. There is a provision, however, I believe being made by the War Department to give the National Guard what the War Department believes to be a sufficient number. Unless we get funds with which to transport them we may be unable to have them. I, in Maryland, have already paid the transportation of a number of Regular Army officers in order to get them into Maryland.

Senator LENROOT. Just what is included in the expense of this item?

General RECKORD. Well, I speak of the officers, but it includes noncommissioned officers. Officers are sent as instructors and noncommissioned officers are sent as sergeant instructors, and this item is supposed to cover the necessary transportation and expenses of those men to properly instruct the units to which they are attached.

Senator LENROOT. Does that cover hotel bills?

General RECKORD. Yes, sir; if he was ordered away from his home station, and had to stay overnight, that would cover his hotel expense while there.

Senator WADSWORTH. Are those traveling expenses of the instructor paid on the per diem basis or on the basis of actual expenses certified by voucher?

General RECKORD. I think they are paid under the Army regulations, Senator. I am not positive that I can answer that.

Senator SPENCER. Actual expenses.

General MYERS. Not to exceed \$5 a day outside of the actual travel. He is allowed \$5 a day, for instance, for sustenance, hotel bill and all that. That is the Army regulation and that is what he is allowed.

Senator LENROOT. But that comes out of this item?

General RECKORD. Yes, sir; and in many instances to get the benefit of this officer in the last year and years before the State has had to pay those expenses.

Senator WADSWORTH. Does the guard generally agree with the importance of having these officers visit the units as often as possible?

General RECKORD. No doubt about that.

Senator WADSWORTH. Do you find them valuable in helping the guard?

General RECKORD. Very, very valuable. Now and then there is an exception to the rule, but all we have to do is write the Militia Bureau and state our case and ask that that officer be relieved and sent on other duty.

Senator WADSWORTH. Do you usually get a reasonably prompt response to a request of that kind?

General RECKORD. Very prompt.

Senator WADSWORTH. And cooperation?

General RECKORD. The cooperation I think has been all that could be desired.

Senator WADSWORTH. Are you getting pretty good teamwork from the regular officers on this work?

General RECKORD. From my own experience I would say excellent. And in addition a school or schools throughout the different corps areas have now been established or are about to be established where the officers who are detailed for this duty will be sent to school to be instructed in National Guard affairs for two or three weeks before they actually report to the units.

Senator WADSWORTH. Do the sergeant instructors do much traveling?

General RECKORD. Well, they do not do very much, Senator, because we have more sergeant instructors than we do instructors, and those sergeant instructors are so located they have very, very little expense. One instructor could probably visit two or three units, so that the expense involved there is very small.

Senator WADSWORTH. I suppose the sergeant instructor comes into more intimate contact with the enlisted men of the unit to which he is attached.

General RECKORD. Undoubtedly. In some instances in the town where he may be permanently located he becomes himself a part of that particular unit.

The policy has been to leave a sergeant instructor with a certain unit for a certain number of months; at the same time he would visit other units close by; then later on he would be permanently moved from that home station to another town where he would become more closely identified with that second unit. In that way they become very closely identified with the different units of the National Guard.

Senator WADSWORTH. In many cases they take part in the formations, do they not?

General RECKORD. No doubt about that.

Senator WADSWORTH. They fall in and do their part of the drill and help the others?

General RECKORD. Yes, sir; we have had some very excellent men on that duty. Of course, the same conditions obtain there as in every other walk of life. Now and then we will get a man who is not qualified for the work. All we have to do is to ask for his relief and state our case, and he is relieved and another man is sent to take his place. That is not very often necessary.

Senator WADSWORTH. There is a better feeling than there used to be, is there not, General?

General RECKORD. Yes; I think much better. I do not think the conditions to-day are to be compared to what they were before the war. I speak, of course, when I say that only from my own personal knowledge; but I think the feeling throughout the guard of the entire United States and the feeling in the War Department toward the National Guard of the United States is entirely changed. The attitude of one toward the other is entirely different from what it was formerly.

Senator WADSWORTH. Is that your last item?

General RECKORD. That is the last item. I would like to say just a few words before I sit down.

Senator SPENCER. Before you go on to that, you have suggested in those five items an increase over the House of \$5,474,500.

General RECKORD. Yes, sir.

Senator SPENCER. Is there any priority in your mind as to the desirability of those items? If it becomes necessary to make any selection between them, are there any outstanding in importance as compared with the others?

General RECKORD. Senator, I do not believe there is, unless it would probably be the third item—the one on training camps. I would hate to have to admit that there is any priority. I think they are all five so vitally important that we should get them all. And, if you will permit me, I will just go a little farther along that line: The national-defense act requires by the end of the next fiscal year a certain strength in the National Guard, and based on that strength the requirements were \$43,000,000. Now, those figures were sent to the Budget committee; the Budget committee cut the figures to \$30,000,000 and said they could not allow the National Guard but \$30,000,000. Now, the House committee cut that to \$21,000,000, and on the floor of the House those figures were raised to a little over \$23,000,000. Now, our figures, if we get this \$5,000,000 plus, which we are asking for to-day, will not then reach the Budget figures of \$30,000,000; but will be \$28,688,500, or \$1,400,000 practically within the Budget figures. And, then, if you gentlemen would only see

your way clear—I was going to use the word if you will only see the wisdom of putting in this bill the proviso which would allow the Chief of the Militia Bureau to switch these funds one from the other we could get along in so much better shape.

Senator SPENCER. He now has that privilege in certain items up to 20 per cent, has he not?

General RECKORD. Yes, sir; but that was only by special act this year. He did not have it in the beginning of the year, but he got caught where he did not have any money to ship material to the different States for the units, and he had to come to the Senate and the House and ask for a special act, which was put through, and at the present moment he has it, but there is no provision in this bill we are now discussing for even that 20 per cent.

Senator SPENCER. Well, that is helpful. I presume, as far as it goes.

General RECKORD. No doubt about it, but it should not be 20 per cent, if you will permit me. It should not be less than 30 per cent, and if you do what I think should be done, you would not make any restriction. You would leave it with the Chief of the Militia Bureau, because he certainly is going to do what is for the benefit of the National Guard, and he could then take money from one heading and use it where he needed it, if he did need it in some other place, and I can not impress upon you too strongly the necessity for at least giving him some latitude in that connection.

Senator SPENCER. General, let me ask you this: Strange as it may seem, those who are here this morning are not the final authority. If it should become necessary to instead of giving you the \$5,474,500 to cut it down to \$4,000,000 or \$3,000,000 or any other lower amount, is it your judgment that the efficiency of the guard would be served by a pro rata handling of the reduction rather than to center it on one or two items?

General RECKORD. No, sir; my judgment—and I have to give this without having had a really sufficient time to study that question—my judgment would be that you should place that money in that particular item referring to the camps of instruction, and add an amendment to the bill giving the Chief of the Militia Bureau the right to change or switch funds from one item to another as he found was for the best interests of the National Guard, and I think then he would undoubtedly be able to work the thing out not only to your satisfaction, if you found you had to cut it, but to the satisfaction of everybody concerned.

Senator SPENCER. That is, if I get you right, first in importance in your opinion would be the camps of instruction?

General RECKORD. Yes, sir.

Senator SPENCER. That could least stand reduction?

General RECKORD. Yes, sir.

Senator SPENCER. Then after that the reduction might be pro rated in any way so far as the appropriation is concerned provided there was a provision that within 30 or 35 per cent limit might be a readjustment of the items in the discretion of the Militia Bureau.

General RECKORD. That is correct, sir, except I did not use the 30 or 35 per cent.

Senator SPENCER. You prefer it unlimited?

General RECKORD. I prefer it unlimited, because I think if you are going to reduce the amount of money, there is all the more reason why you should be liberal with him in the manner in which money is to be expended.

Senator LENROOT. I suppose if there are to be reductions, you would prefer them to be made in those items where they can come to us for a deficiency?

General RECKORD. Well, I suppose so. Now, I do not know, gentlemen, that I can add anything more.

PAY OF ARMORY DRILLS.

Senator LENROOT. I would like to ask you about the last item. You had this year pay at drills \$9,750,000; the Budget estimate is \$8,500,000; the House recommended \$9,000,000, and the House bill gives \$11,000,000.

General RECKORD. I did not just get your question.

Senator LENROOT. I am giving you the pay of National Guard armory drills, the last item.

General RECKORD. Yes, sir.

Senator LENROOT. You had this year \$9,750,000, the Budget estimate is \$8,500,000; the House committee recommended \$9,000,000, and the House puts in \$11,000,000. I would like to ask, first, have you any idea on what theory the Budget estimate cut that item?

General RECKORD. No, sir; I have not.

Senator LENROOT. That is a fixed charge, is it not?

General RECKORD. It is an absolutely fixed charge. You can not get away from it. The law says specifically if a man goes to drill and it is not contingent upon the number of his fellow soldiers who go, but if he goes to drill and there is an officer there and that is his regular drill night he is entitled to his pay and he must get it, and I think it is on that basis that the House raised it \$2,000,000.

Senator LENROOT. \$11,000,000.

General RECKORD. Raised it \$2,000,000, and brought it up to \$11,000,000.

Senator LENROOT. In your experience, what percentage qualify for the maximum number of drills?

General RECKORD. I think you can base that on about two-thirds; 66 $\frac{2}{3}$ per cent.

Senator LENROOT. About 66 $\frac{2}{3}$ per cent?

General RECKORD. Yes, sir.

Senator LENROOT. I find in the House testimony Major Wilson put in a note, "allowing for possibility of facts yet to occur being different from the forecast, it is believed that \$11,000,000 should be appropriated for the armory drill pay for the National Guard for the fiscal year 1923, on the basis of the ultimate strength of 191,000 for that year."

Then later at the same hearing he testified, "If the amount is going to stay at \$30,000,000 and the law stays as it is we will have to get out information that no additional units can be recognized."

What have you to say about that, General?

General RECKORD. I think Major Wilson is a very efficient officer, Senator, and I suppose he bases his statement on figures that he has worked out in the Militia Bureau, and I do not wish in any sense to contradict Major Wilson, because I do not believe I am in position, without sitting down and figuring it all out, to do so; but in

a general way I can say that we have based our estimate on the gradual growth of the National Guard for the coming fiscal year to reach a point where we will have at the end of the fiscal year 191,000 National Guard.

Senator LENROOT. Right there. Is it your opinion that with the \$5,000,000 increase you ask for, making \$28,000,000 in round numbers, that will take care of the guard so that at the end of the year we will have 191,000 men?

General RECKORD. Yes, sir; but because of this fact, that all of those troops will not be in the guard at the beginning of that fiscal year.

Senator LENROOT. I understand that.

General RECKORD. Many of them will not come in——

Senator LENROOT (interposing). I said at the end of the year 191,000?

General RECKORD. Yes, sir; I believe that can be done.

Senator LENROOT. Of course, this item of \$11,000,000 is immaterial to the guard, because that would be taken care of by a deficiency, because it is a fixed liability, but if this estimate is too high from Major Wilson's testimony there is no reason why we should carry a greater appropriation than will be incurred during the year, and if it is too little it can be taken care of.

General RECKORD. Yes, sir; that is correct. I would like to say, gentlemen, that we all realize the necessity of economy, every one of us, but we do feel that the national defense act lays down a certain defensive plan for the country and that the National Guard is a part of that plan, and that if we can work up gradually and efficiently a National Guard that will take its part in that plan and can do it within the Budget estimate, we certainly should not be cut below those figures, and I certainly hope this committee will see the wisdom of our request and will do all they can to give us the figures for which we ask.

Senator WADSWORTH. Are there any other gentlemen here, General Reckord, who would like to be heard?

General RECKORD. There are some here, and this afternoon I understand the National Guard executive committee will be ready to be heard.

Senator WADSWORTH. Are they present here now?

General RECKORD. Yes, sir; General Logan of Massachusetts is chairman of the executive committee.

Senator WADSWORTH. Can we hear them now?

General RECKORD. You can hear them now if it is desirable to you.

Before I sit down will you let me register the objection of the National Guard as a whole throughout the United States to any move to go back to the old Infantry program. We have understood that over in the House in the course of discussion and debate some of the Members of the House have made the remark that the National Guard should be all infantry. We are solidly and unreservedly behind the present plan, which is to make the National Guard an efficient force, not put it back in the position it occupied before the war, and we do not want to have to go through the reorganization again, as we did when we were called out for the last war. For that reason we do not want the Senate to consider for one minute that the National Guard wants to raise nothing but infantry. We

have had this plan of defense carefully studied in the War Department and the allocation of the troops made to the various States.

Senator WADSWORTH. And your own officers took part in that study, did they not?

General RECKORD. National Guard officers took part in that study and helped to work it out, and, in fact, did most of it, and then presented it to every adjutant general in the United States, and without a single exception those allocations were accepted by the States, and the States have gone ahead on the assumption that they would be required within a short period of years to raise those units so allocated, and they are all earnestly striving to do that.

Now, if we had this thing broken up and we would be told by the Federal authority we are not going to have anything but infantry in the National Guard, it will be going back really to what might be termed the Dark Ages, and I think it would throw such a damper over the National Guard that it would practically do away with all of the good that has been accomplished in the last two or three years. And I would like, speaking for the National Guard of the whole country, to register my objection to any such thought. We are all in harmony on it, and on the other hand we are absolutely in harmony and cooperating in every way with the present plan of the War Department, which is 18 National Guard divisions complete with certain corps and Army troops, in order that we may be able to take our place in the defense of the country in time of emergency and do it in the proper way.

Thank you, very much.

STATEMENT OF GEN. EDWARD L. LOGAN.

Senator WADSWORTH. Just tell the committee who you are, General Logan.

General LOGAN. I am Edward L. Logan, Massachusetts, brigadier general.

Senator WADSWORTH. Just give what organization you represent.

General LOGAN. I am chairman of the executive committee of the National Guard Association, and also chairman of this legislative committee.

I am not going to attempt at any great length to tell you about the mental disturbances that the National Guard has had in the last 10 years over the militia policy of the United States except to say that when the war was over and the representatives of the Army and the National Guard and the organized service assembled here in Washington to work out the permanent military policy of the United States it worked out a policy which was accepted with enthusiasm by all the component elements of those who formerly composed the Army of the United States, and I do not think there has been a moment from the time that bill was enacted into a law down to the present when everybody who formerly served or who now serves was anything but enthusiastic for the contents of that military policy. It has been indorsed by the present component parts of the Army of the United States as defined by the act of 1920, and I only have to recall the very great pleasure which the American Legion had in its military policy committee when it was here at the early part of the year again to reiterate its faith in the military policy adopted by

the United States and to ask for the continuation of the necessary appropriations properly to administer that act.

When we were here before, in January of this year. I think, we called the attention then of this particular committee that the appropriations then contemplated for the National Guard were less than the necessary amount to allow the National Guard properly to function, and we urged this committee—and that was a committee then composed of officers of the Regular Army, of the National Guard, and of the Organized Reserves—we all together urged this committee to give for the National Guard at least the amount which had been called for by the Budget.

When it became apparent as a result of the interviews which the military policy committee of the American Legion had with the various groups representing the House of Representatives upon this question that there was to be a substantial reduction in the amount that the citizen soldiery believed was absolutely necessary for its proper functioning and training, there was called together in the city of New Orleans the National Guard of the United States. Officers representing all the States came there, and there met at the same time with us and often in the same room the organization of the adjutant generals, and we came away from that convention unanimous, both the adjutant generals and the National Guard Association, that it was essential for the proper development of the act of June, 1920, and the component parts of the United States, to get the necessary appropriations to continue that work.

Now, it is not necessary for me—at least, I am not going to attempt to go again into the analytical details of the figures which have been presented to you by the adjutant general from Maryland. I think he has done his work so marvelously well and outlined the views so clearly that you gentlemen do not want me to attempt to repeat the things he has said.

I want, however, in behalf of the National Guard of the United States—not the adjutant generals, but the men who are actually doing the soldiering—I want to reiterate every word that he has said, and say that we indorse all the figures which he has given you, and that we urge as strongly as we can urge upon you to give the amount of money not only as asked for by the Militia Bureau and the adjutant generals but by the rank and file of the United States, to allow us to properly function.

I think there was one question asked as to whether or not if there had to be a selection of figures which figure ought to be selected. General Reckord has said that he wanted the amount which is necessary for the summer training, but I want to call particularly to your attention the first two items about which he talked, the items for the animals and for the matériel.

General Reckord referred to it again in the latter part of his speech when he called attention to the determination of those who are in the Military Establishment to gather together and hold together all of its component parts. We can not function properly, and you will destroy the enthusiasm of the National Guard, if you ask it to function now and in the future only as Infantry. And I say that as one who has been an infantryman all my life and who does not care to be connected, at least professionally and intimately, with any other

branch of the service. But just as many of us are infantrymen and want to continue as such and are willing to give our time and enthusiasm for the development of that branch in which we are most particularly concerned, so these other men who are cavalrymen or artillerymen will give a great deal better service to the country if you allow them to function as such.

So we want to appeal to you to continue that part of the appropriation which will allow the proper amount of equipment to these units of the National Guard. I mean it applies to my State as it applies to the State of New York that you have heard from, as it applies to Pennsylvania, as it applies to all these States in a greater or a less degree. And the same degree of enthusiasm results in every one of those men, whether an infantryman, cavalryman, or artilleryman, all along the line to carry out the policy of that act and make effective the future Military Establishment of the United States.

I do not know as there is anything particularly I want to say except that the National Guard reiterates all that General Reckord has said, urging you as strongly as we can to give us the amount of money which he has asked for and which we join him in asking for.

The National Guard in New Orleans assembled directed us to come here and to urge the continuation of the appropriations called for in the Budget, and, while the figures we have given here are a million dollars less than the figures set forth in the Budget, we do urge you as a minimum to give the figures which General Reckord has stated.

We will attempt, on the other hand, to give you the degree of efficiency that we believe the citizen soldier possesses and which he is particularly anxious to furnish to the people of the United States in time of peace and when called upon to furnish in time of war.

If there are any questions I can answer, I would be very glad to answer them, but I have only expressed it in a general way, because General Reckord has done so well with the detailed explanation.

Senator WADSWORTH. I do not want to prolong the hearing, but there is one item here which has always appealed to me personally to be very valuable and that has not been touched upon. It is the item of expenses of officers and enlisted men in schools. Budget estimate \$348,410, current appropriation \$225,000, and the House bill \$250,000. That is the item that makes it possible for commissioned and non-commissioned officers of the National Guard with their own consent and on their own application to return to schools like Benning and Knox.

Have you any observations to make as to the value of that?

General LOGAN. We have sent from our State this last year three men—one was a lieutenant colonel, one was a major, and one a first lieutenant. They were picked men, as all men are who have been sent to Benning, and they came back as a tremendous asset not only to their organizations, but to the organizations outside even of their own. They came back with three months, as I recall it, of very excellent education and with an enthusiasm for the work which has been very largely increased by reason of their service there, and they have been used by their organizations to supplement the work of the inspector-instructors, and have been used not only by their own regiments but have been sent to other regiments as instructors and lecturers.

This matter came up before the Legion convention, and I remember the American Legion itself strongly urged not only a continuation of this work and larger appropriations for Benning, but my impression was that last year there were only allowed to be about 88 men there representing the National Guard. We are anxious for as large a representation as we can get in that school, because we believe in the long run no greater service can be rendered by these men as instructors than by sending them there and letting them come back and give the National Guard the instruction they so wonderfully get at Benning.

Senator WADSWORTH. I am glad you speak favorably of it, irrespective of whether the committee will feel able to increase the House appropriation, because personally I believe that work is one of the most important elements in tying together the interests of the professional and citizen soldiery.

General LOGAN. I mean it would be a wonderful advantage to the country if every man of the National Guard could at some or other get that school instruction at Benning. Of course, that is out of the question. So we pick the very best men we can get, who go down there under the circumstances, and come back and give the Government a most excellent return for the money the Government spends on them. The money spent for the National Guard to go to Benning is every penny of it most wisely spent, in my opinion.

Senator SUTHERLAND. Have you been to Camp Benning?

General LOGAN. No, sir; but I know from men who have been there and in conversations with instructors there as to the scope of the work and what they are doing.

Senator SUTHERLAND. Do you regard that as one of the best of the new projects that have arisen as a result of the war?

General LOGAN. I should say it was; yes, sir.

Senator WADSWORTH. General Reckord has stated, I think, that there are not enough inspector-instructors. What is your observation so far as Massachusetts is concerned, or any State with which you are familiar?

General LOGAN. I understand we have now assigned to each organization one inspector-instructor. I understand it is the policy of the War Department to increase the number. There is not any doubt it would be a very wise policy and a very beneficial one if we can get the inspector-instructors increased. These men are professional soldiers and know their business, are in sympathy with the organization and anxious to give what they have to the men and officers. The more efficient men you can get the more efficient we will be, and the more generous the Government can be in sending these men the better outfits we can furnish in time of war. I believe in as many inspector-instructors as we can have consistent with the finances of the Government, and the more we get the better we will be, and the Government will be, in the long run. I understand it has been contemplated to send one to each battalion of Infantry.

Senator WADSWORTH. I think that plan has been somewhat modified. It might be thought necessary, and I think the War Department has reached the conclusion where a regiment of Infantry is in one city it would not be necessary to send an instructor to each battalion, but where the regiment is separated it would be necessary.

General LOGAN. In Massachusetts I do not think we have ment in any one city.

Senator WADSWORTH. Not in Boston?

General LOGAN. I do not think in Boston, even. The One and first Infantry has two battalions under one head, but the battalion of that regiment in Cambridge and one in Boston, have more concentration in Boston than in any other place.

Senator WADSWORTH. The adjutant general of Texas informs there are only two inspector-instructors there, and they want six

General LOGAN. The question you raise about instructors raises a very interesting question. Those who were assigned to duty with the Organized Reserves are considered on duty with the troops, those inspectors who are serving with the National Guard by relation are not considered as doing duty with troops, and are very likely at some time or other to be relieved from that duty. I think these men who are specially fitted and apparently specially trained for that work ought to continue as long as their efficiency continues with those organizations, and there ought not to be any transfer. It seems to me that some time or other in some form or other the regulations ought to be changed to have those men considered as on duty with troops; and, therefore, allowed to continue functioning along that line, because they are men of special efficiency and are bound to be because of their experience.

Senator WADSWORTH. That is a matter for War Department administration.

Are there any other questions any members of the committee want to ask General Logan?

Colonel RUMBOLD. The policy will now be for duty with the National Guard to be considered duty with troops.

Senator WADSWORTH. General Reckord, have you anybody else here who would like to be heard?

General RECKORD. No, sir.

General LOGAN. We have General Price here, who commands the Division of Pennsylvania, and he has said with his usual modesty that he has nothing to say, but perhaps you would want to hear him.

Senator WADSWORTH. If there is any new point, we would be glad to have it brought out.

I think the committee would be glad, before you leave, if one of you would leave with the clerk of the committee the names of the adjutant generals here present and the names of the executive committee of which General Logan is chairman, and the proxies you have.

(Whereupon the committee recessed until 2.15 o'clock p. m.)

STATEMENT OF MAJ. GEN. GEORGE C. RICKARDS, CHIEF MILITIA BUREAU, NATIONAL GUARD.

Senator WADSWORTH. General Rickards, can you enlighten us on one or two little matters?

We had a discussion this morning with the adjutant generals and the executive committee of the National Guard association concerning the size of the guard and the relation between size of the guard and

the several estimates that have been made at one time or another. Perhaps we can start by letting me ask two or three questions.

NUMBER OF MEN IN GUARD.

You have 148,000 men in the guard now?

General RICKARDS. Practically 150,000, probably, to-day.

Senator WADSWORTH. We will call it 150,000 in round numbers.

General RICKARDS. All right.

Senator WADSWORTH. You expect, as I understand, that by July 1 next you will have in the neighborhood of 175,000?

General RICKARDS. One hundred and sixty thousand.

Senator WADSWORTH. One hundred and sixty thousand?

General RICKARDS. One hundred and sixty thousand.

Senator WADSWORTH. Do you also expect that by the end of the summer training period, we will say some time in the month of September, 1922, you will have in the neighborhood of 175,000?

General RICKARDS. One hundred and seventy-five thousand to one hundred and eighty thousand.

Senator WADSWORTH. How many do you expect to have at the normal rate of increase by the end of the next fiscal year?

General RICKARDS. Well, with the normal increase as it has been going on we should have about 195,000.

ORIGINAL ESTIMATES.

Senator WADSWORTH. Going back to the estimates for a moment. As I recollect it, you informed the committee that the original estimate by the Militia Bureau for the appropriation for the fiscal year 1923 was, in round figures, \$43,000,000?

General RICKARDS. \$43,000,000.

Senator WADSWORTH. That was reduced to \$30,000,000 by the Budget, which figure, of course, you now accept perforce?

General RICKARDS. Yes.

Senator WADSWORTH. Will you tell us whether that \$30,000,000 will be sufficient to support the guard on the theory that it will reach a maximum strength of 191,000 at the end of the next fiscal year?

General RICKARDS. I do not think it will unless I curtail some of its activities. Unless I curtail the organization of the more expensive units, such as the 155 Field Artillery units and air units, I can not meet the cost of the guard in its natural growth with \$30,000,000.

Senator WADSWORTH. General, the revised estimates from the Budget, which we understand are on their way to the committee, and which total instead of \$30,000,000, \$28,660,000, will support just that many less, will they not?

General RICKARDS. You remember there were some items that I did not make any specific increase in or request for any specific amount, that I said were inadequate. There is a difference of about \$1,400,000 between our last estimate and the Budget allowance. I have stated the very items that it would be necessary in our estimation to have increased, and we leave it now with the Committee entirely as to whether those other amounts which I say are inadequate are to be increased and how much they are to be increased. In other

words, I have left about \$1,400,000 there for the generosity of the Committee to work with.

Senator WADSWORTH. With an appropriation aggregating \$28,660,000, are we to understand that you will be unable to accept federally any additional unit?

General RICKARDS. Oh, no. I do not want you to get that idea in your minds at all. But only those excessively—that was based, Senator, on my proposition of completing divisional units during the next year and practically disregarding Army and corps troops in the National Guard. My effort, as I said the other day, is toward progression in organization. Restricting the recognition of units was not to my satisfaction, because it said mounted troops. That I tried to correct and I guess the stenographer got me, that what I meant there was Cavalry troops, but I would not like to restrict it to all mounted troops, because I am very anxious to go on with the divisional artillery, which is mounted troops.

I want to complete as nearly as possible during the next year the eighteen divisions. That is my objective now.

UNITS NOT TO BE ACCEPTED UNDER PROPOSED APPROPRIATION.

Senator WADSWORTH. Then we understand the units you will not be able to accept will be what might be called non-divisional or corps and army troop units?

General RICKARDS. Yes.

Senator WADSWORTH. Will the \$28,660,000 permit you to make substantial progress towards the completion of divisions, so far as the units of divisions are concerned, and at the same time permit an increase in the enlisted strength of those units that are now comparatively low?

General RICKARDS. I think it will. There may be some, as I said the other day, that the changes in these estimates of ours, sub-appropriations as I call them, that were made arbitrarily without consultation with the Militia Bureau, and some of which are inadequate, it would be necessary for us to change from one fund to another to increase a depleted fund. We have had to do that during this fiscal year. We have had to come into Congress and ask for that privilege, having exhausted the 20 per cent privilege we had of transferring from one fund to another.

LUMP SUM.

I think if I had the \$28,660,000 in a lump sum I could make a substantial increase in the National Guard both in numbers and in efficiency and have some money left at the end of the fiscal year.

Senator LENROOT. Then, General, I take it you would desire to correct the testimony you gave in the House in that respect. I would like to call your attention to your testimony in the House upon that subject:

With an appropriation of \$30,000,000, which the Budget carries, we will be able to maintain approximately 143,000 National Guard during the fiscal year 1923 and no more.

Then you go on and give the personnel of the guard.

Mr. ANTHONY. Right there, General, you state that the Budget estimate is \$30,000,000 for the support of the National Guard.

General RICKARDS. Yes.

Mr. ANTHONY. And it will maintain how many men?

General RICKARDS. Approximately 142,000.

Mr. ANTHONY. It will not permit any further growth of the National Guard? General RICKARDS. No; with that amount of money it will be necessary for us to restrict the further reorganization of our units, because we can not recognize any new ones.

General RICKARDS. Well, I did not intend to say that we could not recognize any new units. I don't know whether I had an opportunity to correct that testimony or not. I presume I did.

Senator LENROOT. Later you said:

If there is an intention on the part of Congress to have this force increased either in its enlisted strength or in the organization of new units, which are still required by the plans of the War Department, material increases will be necessary.

Now, it is your judgment——

General RICKARDS (interposing). We were talking then of the \$30,000,000 or of the \$21,000,000?

Senator LENROOT. No; of the \$30,000,000. There was no \$21,000,000 under discussion. This is \$30,000,000. This is repeated several times, and you go into detail as to how much more it would require if the guard during the year was increased to 191,000, and you said it would cost \$42,456,000.

LIMITS TO WHICH GUARD CAN BE EXPANDED UNDER PROPOSED APPROPRIATION.

Now we do understand your testimony that if this increase of \$28,000,000, or whatever the sum is, is granted, you can take care of——

General RICKARDS (interposing). Of the divisional troops.

Senator LENROOT. Of the increase in the guard to the estimate that you have made, but will not recognize any of the more expensive units, is that what I understand?

General RICKARDS. That is correct.

Senator WADSWORTH. Of course, you can see, General, how sure we wanted to be about that, because if this committee should recommend an increase and the testimony before the House committee was thrown in our faces on the floor of the Senate, we would have to be very, very certain. You have no doubt about it yourself?

General RICKARDS. I have no doubt about it at all. I will say this, that my plans for organization have been somewhat modified since the hearing before the House, based, of course, on the financial support.

The hearings before the House committee were based on the system of organization prescribed by the General Staff, which included divisional troops, corps, and Army troops, and G. H. Q. reserve troops. The average maintenance cost for a National Guard man, under that scheme, is \$210 per man. If this plan is adhered to strictly, the appropriations requested from the Senate committee for the National Guard would only maintain about 134,000 men, but it became apparent in the hearings before the House committee that there was no disposition to encourage the organization of corps and Army and G. H. Q. reserve troops. Thereupon the Militia Bureau adopted the idea of developing divisional troops only, which is believed will materially reduce the average cost of maintenance of a

National Guard man, and the testimony given before the Senate committee is based upon this new assumption and is the only reason which would justify the Militia Bureau in departing in any way from its testimony given before the House committee

Senator LENROOT. One other question: Will this \$28,000,000 permit the maintenance of horses for the units now recognized, to which horses have not been furnished?

General RICKARDS. It will; an addition of 1,746 additional horses.

Senator LENROOT. I have no further questions.

STATEMENT OF BRIG. GEN. W. D. CONNOR, ASSISTANT CHIEF OF STAFF.

Senator WADSWORTH. General Connor, will you proceed with your statement?

General CONNOR. I am the Assistant Chief of Staff, in charge of such supply and transportation and financial matters as come to the War Department for the consideration of the Secretary of War. For that reason I have no interest in any particular section of the bill; but will touch on certain points that deal with major items that affect the Army as a machine, and with certain provisions which either render the bill difficult of interpretation or make the operation of the Army unnecessarily difficult under limitations that are written in the bill as it passed the House.

ISSUE OF RESERVE STOCKS.

The first point, that I would like to touch on, is the provision that is written in the bill in four different places: First, on page 11, line 3, where there is a proviso that the Reserve Officers' Training Corps supplies and equipment may be furnished from the reserve stocks of the War Department without payment from the appropriation.

Senator WADSWORTH. It is mandatory; "shall be."

General CONNOR. "Shall be." The same proviso is on page 13, line 5, in regard to the civilian military training camps; and on page 81, line 30, as regards the National Guard, and the effect of this is that the reserves that have been set up of articles which can not be immediately procured in time of need will gradually be eaten into as these issues are made, assuming, if it is passed this year, it will become a precedent and continue, inasmuch as it is a source from which apparently the Government will obtain supplies and equipment for which there will be no expenditures.

This reserve stock that is set up is what we have saved out of the supplies and material that were produced and acquired during the war and has not been set up in an arbitrary or guess-work manner. Each item of the main articles of supply and equipment were made a study by the service that procures them. First, we gave them a curve showing the rate at which troops were to be inducted into the service.

Senator WADSWORTH. You mean in time of war?

General CONNOR. In time of war. And we will say, for purposes of illustration, that we would raise 2,000,000 men during a period of 12 months. With that as a basis for the rate at which the item

would be consumed, they were directed to prepare a curve for each item showing the rate at which they could produce that item, and then at a certain time they find that by their increased facilities they can produce the item as fast as it is being consumed.

If those two curves are plotted on the same background you get a certain amount that they have got to have to start with, and which we call the reserve.

So, if this horizontal distance represents a year, we plot here one curve giving the information as to how fast that item is going to be used up and then they prepare another curve below showing how fast, based on their experience in the World War—and on every item that is fairly exact—that item can be produced, on the rate at which they can procure the item.

At some point the rate of consumption and rate of procurement are equal and you have got to boost the whole lower curve up that distance (representing the reserve stock) to tell how much you are going to keep on hand in order to supply the Army of, we will say, 2,000,000 men, and not 2,000,000 men on the day the need may commence, but say at the end of the year.

On most items there is no reserve. It is only on the items that can not be procured in the market or can not be started and produced by the time they are to be used that there is any reserve kept up. To illustrate what these items are, uniforms can be procured more quickly than blankets; therefore, for an Army of 2,000,000 men we are only maintaining a reserve of a certain number. I do not give exact figures, because this is a public hearing, but we will say 400,000 uniforms are needed until they can get into their stride in production and will produce the rest of the 2,000,000 as rapidly as may be needed by the troops called into the service.

In guns and heavy munitions you practically can not get into full production inside of 14 or 15 months. Therefore, you have to keep your reserve up to the amount that would be used during that period of preparation.

The question of what we are keeping has come up once or twice, and I would say that under the Quartermaster Corps, for instance, we are keeping no underwear, no socks, no motor vehicles, no tools, nails, construction material, and things like that which can be purchased in the open market; no food, no shoes. But we found that we need, say, 30,000 to 35,000 sets of harness before we can get into production, and we are keeping that amount of reserve. And the same way with woolen coats and breeches, we are keeping a small amount, but not nearly enough for the whole number we are looking forward to.

Rolling kitchens can not be produced in time, and we have them on hand. They do not deteriorate very materially, and therefore we keep them in reserve. In the Signal Corps we keep no batteries, no wire, or anything like that; only the special telephone apparatus for field service and the radio sets that are also portable.

Of field materials for the engineers we keep very little, except pontoon material, searchlights, and such things, because most of their equipment is commercial stuff.

I simply want to show what we call the reserve does not include the great mass of stuff that is surplus and excess in the War Depart-

ment; and when we ask to have the words "or reserve" cut out, we really are referring to the things that ought to be kept because they can not be produced within a reasonable length of time, even under emergency circumstances.

Senator LENROOT. Take the proviso you call our attention to on page 11. What stocks will be affected if the word "reserve" remains in?

General CONNOR. It would ultimately affect uniforms and harness, tentage, and equipment, like canteens, meat cans, etc. That would be the usual thing.

Senator WADSWORTH. Mess equipment?

General CONNOR. Mess equipment.

Senator LENROOT. As to uniforms: While you may have a certain reserve, of course, uniforms do deteriorate, and you would have to prepare a certain percentage of reserve annually anyway, would you not?

General CONNOR. Yes. Now, on that, we have a great many surplus uniforms anyway, and for a considerable period—I do not know how long—we can issue from the surplus.

Senator LENROOT. Over this next fiscal year?

General CONNOR. I am morally certain we could probably get over the present fiscal year, and probably for a longer period than that; but it is the precedent of using up the reserves without replacement we want to cut out, because we have an enormous amount of surplus material, but we do not call it reserve.

Senator LENROOT. Is it the precedent you fear?

General CONNOR. Yes; the precedent.

Senator LENROOT. If it were not for the precedent you could get along for this year under the circumstances?

General CONNOR. Yes. If you want me to give an assurance to the committee, I will take up that subject and see whether actually every item can not probably be issued out of surplus.

Senator WADSWORTH. For the R. O. T. C.?

General CONNOR. For the R. O. T. C. and the C. M. T. C. and the National Guard.

Senator WADSWORTH. Do you declare articles like mess equipment surplus?

General CONNOR. I think there was a good deal declared surplus.

Senator WADSWORTH. Are you able to sell it?

General CONNOR. It goes mostly as metal, if it is sold at all. I am not sure of the particular item you mention—mess equipment—but a great deal of stuff that is pure military equipment has been sold, because we had such enormous quantities of it that the storage—the cost of storage—did not make it worth while to keep it.

Senator WADSWORTH. Mess equipment includes the meat plates, knives, forks, and spoons?

General CONNOR. Yes. I do not know that we have sold those particular items, but I know many items which have nothing but a military value have been sold because it would not pay to keep them, but I think probably not meat cans, because there is practically no deterioration in aluminum. But field ranges and pans that do rust and become useless in three or four years, much of that material has been sold.

Another objection, of course, to that is that it makes a blind appropriation and never does show what the amount being used is.

CIVILIAN MILITARY-TRAINING CAMPS.

On page 12, line 24, the proviso for the civilian military-training camps, General Lassiter brought out the point that after the words "section 47-d" there be written in "and for such other expenditures as are authorized by section 47-d and may be necessary for the establishment and maintenance of such camps."

The R. O. T. C. and the C. M. T. C.—I use those initials, which are well known, I think—are not parts of the Regular Army, and it would seem wise from the Regular Army appropriation standpoint that a definite amount be fixed that would be used for those auxiliary purposes, and if the total amount is set up for the civilian military training camps, just as it is for the reserve officers' training camps. Congress knows each year what it is spending for those quasi military activities, and it does not come as a blind drain on the Regular Army appropriation. So I would second General Lassiter's suggestion that what is appropriated should be what they actually cost.

The Organized Reserves and those things are part of the Regular Army of the United States, and as such can be handled in a different manner.

Senator LENROOT. Can you give us an idea what cost would be covered by the insertion of those words?

General CONNOR. It would be all the preparation of the circulars that go out to men who apply for information; there would be the preparation of the camps to receive them. You would have to transport tentage to the camps for their use, you have to build tent floors, you have to hire cooks to run the camps. In other words, the cost of preparing for and running the camps.

Senator LENROOT. No very substantial sum?

General CONNOR. No; but it is a drain. They are always seeking, if they have a big appropriation like the Army appropriation, for all sorts of things; but if you can say "that is the amount Congress assigned to that activity" they cut their suit to fit the cloth they have.

PAY OF THE ARMY.

On page 15, at the top of the page, I would strongly urge that the item of pay be considered in the light of this later prescription of the House that certain officers shall be discharged, etc., with a year's pay.

The item of pay as written in the bill is basically for the 11,000 officers provided in the bill at the 1908 schedule; and if that amount only is appropriated, then there is not enough pay for the Regular Army, because later in the bill it specifies that the Secretary of War shall reduce the Army until he can run it within this item of pay; and if at the first of the year there are 100 or 200 or 1,000 officers discharged with a year's pay, and it comes out of that, the Army will have to be reduced that much more.

Senator WADSWORTH. In other words, it would not pay 11,000 officers?

General CONNOR. No; it would not. The Chief of Finance probably gave that more in detail, but it is one of the provisos that can not be carried into effect with the amount of money appropriated.

Senator LENROOT. That is, this sum would pay just 11,000 officers?

General CONNOR. Yes: 11,000 officers on the basis of the 1908 schedule of pay.

PAY OF OFFICERS OF THE OFFICERS RESERVE CORPS.

On page 17, line 3, there is an appropriation for pay of the officers of the Officers' Reserve Corps. There are 11 officers on duty in the War Department of the Officers' Reserve Corps at a cost of approximately \$50,000 a year, so that leaves only \$200,000 for pay, and inasmuch as the training costs about \$115 per officer for the 15 days, that would leave something less than 2,000 officers who could be called into the service for training, whereas the plans of the War Department contemplate approximately 20,000 per year.

Senator HARRIS. How much do you want for that?

General CONNOR. The item set up in the Budget was \$3,927,902.

Senator HARRIS. And it would take the full amount?

General CONNOR. The full amount is estimated in the Budget.

Senator LENROOT. \$250 000 would give you the same as it is this year?

General CONNOR. Approximately, and practically no activity could be carried on.

DISCHARGE OF ENLISTED MEN.

On page 18, line 16 to the end of the page, "the Secretary of War under such reasonable regulations as he may prescribe is directed" to grant applications for discharge of enlisted men so as to bring the Army down to 115,000. No date is given.

A later proviso on page 22, lines 16 to 19, would accomplish the same purpose. It says the Army shall be reduced by the Secretary of War so that the sum herein appropriated shall defray the entire cost of the pay of the officers and enlisted men of the line and staff during the fiscal year ending June 30, 1923. If this first directive is left in here as it is written, the Secretary would have to discharge a lot of men immediately unless it were made so that he could at least stretch it until June 30 and take advantage of the expiration of services that would come in that time; to discharge them at once would result in paying the men transportation money amounting to \$55 to \$60 a person for every man discharged, and then have to re-enlist others right away. So the first proviso, page 18, really is unnecessary, in view of the later proviso on page 22. In point of fact, it is unnecessary anyway, because we have not any Army transportation money to waste on paying men discharge money, and the present rate of enlistment is such that unless we increase it the Army will be down so there will not be any necessity for that paragraph anyway.

Senator HARRIS. You would like to have that stricken out?

General CONNOR. Yes; that last part should be stricken out.

Senator WADSWORTH. Which one do you suggest be stricken out?

General CONNOR. Page 18, the last part, lines 16 to 24.

Senator SPENCER. That makes it compulsory

General CONNOR. After the words "\$48,863,088," if that were all struck out. I do not think it is necessary, and it certainly will all be accomplished without that proviso.

Senator LENROOT. The paragraph on page 22 will cover it?

General CONNOR. That of itself will accomplish it.

Senator LENROOT. That should stand?

General CONNOR. That should stand.

Senator LENROOT. And that of itself would prevent any deficiency of pay for officers and men?

General CONNOR. That of itself, as far as this bill is concerned, takes away any authority the Secretary of War might have to create any deficit for pay of the Army.

Senator WADSWORTH. It is the same paragraph we put in the current appropriation.

General CONNOR. It is all that is necessary, certainly.

Senator HARRIS. General Connor, the way this is written it says 115,000 enlisted men. Suppose the amount is changed? But the point I wanted to make was this: Does this enable you to go over 115,000 and have an average of 115,000, or is it limited to this number? I imagine it is difficult to keep it at just 115,000.

General CONNOR. You can not keep it at a fixed number. You have to have a certain leeway, because enlistment goes up and down, and whatever amount is fixed is bound to be an average, unless it is a maximum.

Senator HARRIS. Can you go above the 115,000 just so long as it is an average of that number?

General CONNOR. I do not think there is any other prohibition written in except that 115,000. I guess you are right, there.

Senator HARRIS. Mr. Chairman, do you understand they can keep an average of 115,000 under this law here, or would they have to limit it to that number?

Senator WADSWORTH. I should think they were limited in number. The implication is it will be reduced to that number and will have to stay there.

Senator HARRIS. We appropriate for 115,000 and take it for granted they will be enlisted up to the full amount all the time. Would it not be better for us to put in an average of 115,000 so they could run it above or a little below?

Senator WADSWORTH. That was the intent of the Congress in the current appropriation bill. We did not put the number in. We simply said that the Army shall be reduced to such an extent that the amounts heretofore appropriated for pay shall pay the Army. We knew that it would average 150,000 white troops.

Senator HARRIS. Would it not be better than to have the amount as it is here?

Senator WADSWORTH. Personally I think the general's suggestion that the taking out of the proviso on page 18 relieves them of that complication, and that the paragraph on page 22 accomplishes what the House wanted to accomplish, is correct.

Senator SPENCER. General Connor, how does that help you if the amount of money which the House has appropriated is only sufficient to pay 115,000 men for 12 months; and that is true, is it not?

General CONNOR. Yes.

Senator SPENCER. Then that means, if you have more than 115,000 men in the first month you have got to have less than 115,000 later on in the year, does it not?

General CONNOR. I can illustrate that: If this bill were passed to-day under this language actually as it is written, and if the Secretary did not feel that he had leeway, we would have to discharge, say, 17,000 men.

Senator SPENCER. Enough to bring it down by the 1st of July to 115,000?

General CONNOR. It does not say the 1st of July. If it said the 1st of July I would have no particular objection to it. But it says, "shall become effective immediately on the approval of this act." If we had until the 1st of July it would get down automatically; but if it is to be done right now, we would have to discharge 17,000 men and pay them \$55 each transportation, and we have not the million dollars in the Army transportation funds to do that.

Senator HARRIS. It would be less expensive to do it this way?

General CONNOR. If we stopped enlistment to-day the Army would be down to 115,000 before the 1st of July.

Senator HARRIS. This would not only be more expensive but more difficult.

General CONNOR. Yes; and would not get the people out who are going out a few months from now. If the Secretary had the leeway to do it by the 1st of July he could do it without any difficulty at all.

DISBURSEMENT OF PAY OF ARMY AS ONE FUND.

The next is on page 22, line 15. For many years there has been in the appropriation bill a provision that the items of pay for the Army shall be disbursed as one sum. I think that the Army rather reaps the punishment for the Navy, because in the House committee I heard one of the members, when they were asking for a single appropriation, refer to a Navy appropriation for a certain amount for ordnance, and he went on and said they did so and so with it. All those one-fund provisions in the Army are cut out, but, strangely enough, in the Navy appropriation bill there are three lump funds—pay for the Navy, pay for the Marine Corps, and what constitutes the Quartermaster's appropriation. Each of these is made one sum in the naval bill, although he quoted the acts of the Navy and used them as the reason why he did not want to give us one-sum appropriations. He said he had no criticism of the Army; so far as he knew there had never been any abuse of that one-sum proviso. So I recommend very strongly that the old provision be inserted—that "all the moneys hereinbefore appropriated for pay of the Army and miscellaneous shall be disbursed and accounted for as pay of the Army, and for that purpose shall constitute one fund."

Senator SPENCER. What is the "miscellaneous" after "Pay of the Army"?

General CONNOR. It refers to a certain listing as miscellaneous on the previous page, line 21, page 20. It just blocks the whole sum in so you do not have to establish a reserve and do a lot of bookkeeping on each particular item.

Senator WADSWORTH. That was discussed at very great length last year when we were providing the current bill. The House has insisted for the last two years on definite itemization.

General CONNOR. Yes. But, as I say, they quoted the \$10,000,000 appropriation for the Navy ordnance and objected to the building of a very elaborate post down the river here as the reason they did not give it to us, and yet right here in the Navy bill that the House has reported this year they have got three of those single items set up, and we got none of them in the Army bill. The bill is very much subdivided, anyway. For every subdivision you have you have got to set up a reserve against a deficit, and if we had a single appropriation for pay we could simply hold out one sum for a reserve and watch that sum. But without that single pay item you have got to hold up a reserve on every single item mentioned here in case of emergency, and it makes an awful lot of work and bookkeeping and does not let you work with the freedom and simplicity with which you otherwise could work.

So far as these items of pay are concerned, every one of them is statutory and no disbursing officer would think of paying anything except in accordance with the statute, because he would lose the money if he did. So on this pay item there can be no objection from any point of view, because every item is statutory.

Senator LENROOT. Except one—clerks and other civilian employees of the Finance Department.

General CONNOR. I do not think that comes in as pay of the Army.

Senator LENROOT. Where would this insertion come?

General CONNOR. Between lines 15 and 16 on page 22.

Senator LENROOT. If that is true, it would be all the moneys heretofore appropriated for pay of the Army.

General CONNOR. For pay of the Army.

Senator LENROOT. That naturally would include that \$1,000,000 then under miscellaneous.

General CONNOR. Miscellaneous is pay of surgeons and pay of nurses, etc.

Senator LENROOT. That \$1,000,000 I referred to is included under the head of miscellaneous, lines 14 and 15 on page 22.

General CONNOR. Yes; I see that is right. That is the only item. I do not believe that would be considered as pay of the Army for it is not, because they are civilians.

Senator WADSWORTH. It is under that heading. If the phrase were to be put in it seems to me it might well be put in after line 3 on page 22.

Senator LENROOT. Yes.

General CONNOR. Yes; that would accomplish the result.

Senator WADSWORTH. Those three items—

General CONNOR (interposing). Are fixed amounts.

Senator WADSWORTH. You do not hold any reserve out for them?

General CONNOR. No.

Senator WADSWORTH. Compensation of clerks, finance department.

General CONNOR. No. After line 3 on page 22 would accomplish the purpose absolutely.

SUBSISTENCE OF THE ARMY.

Page 27, line 10, the item for subsistence ought to be \$18,000,000. I recommend very strongly that the figure be put back to that, and that is based on 150,000 American troops and 7,000 Philippine Scouts.

Senator LENROOT. That, of course, must be with relation to whatever we may decide shall be the size of the Army.

General CONNOR. Yes.

Senator HARRIS. Have you any figures for different sized armies, General?

General CONNOR. No; the Secretary submitted several estimates on that and in general terms that figure includes \$3,000,000 for commutation of rations for various people and is based on a ration cost of about 30 cents during the next fiscal year for the rest of the Army.

Senator LENROOT. In that connection, we have three estimates, one on a basis of 122,000 men, one of 132,000, and one of 157,000. All those include the Philippine Scouts.

General CONNOR. Yes; all include the Philippine Scouts.

SALES COMMISSARIES.

Senator WADSWORTH. Speaking of page 27, have you any comment to make on the two paragraphs next following the subsistence appropriation?

General CONNOR. Yes; but as to those two paragraphs, I will not go into the history of the commissaries, because everybody knows it, but for many years these sales commissaries have been established throughout the Army, and while here in Washington they are not necessary, perhaps, and at eastern stations close to large cities, they are not necessary, yet when you go to the other extreme and go to a place like Fort Apache in Arizona, or worse yet, up in Alaska, the men are many miles away from any kind of civilized conveniences, and this proviso would work a very genuine hardship in those cases.

Senator WADSWORTH. In what way?

General CONNOR. Well, a man goes to Alaska in the Army, he gets the pay of his grade and length of service, and if he is forced to buy things there in the local market, the staple articles of life, he buys them at a tremendous cost. But you take the case of a civilian, who goes to Alaska, even a civilian laborer gets enormous wages, relatively, to what he gets in this country. In other words, when a man goes into those isolated places, his pay automatically goes up in civil life according to the difficulties of living, but in the Army the pay does not go up.

Senator LENROOT. This language merely provides they shall not be operated at a loss.

General CONNOR. At the same time, if you have to pay transportation to Fort Nome, Alaska, by the time the man gets it the cost is prohibitive.

Senator LENROOT. That is a small percentage of the cost of the commissaries.

General CONNOR. I grant you that, but I say as written it would work a hardship. The Secretary of War has endeavored to meet the spirit of this within the last six months. He has had an investigation made of the near-by example that most people have in mind when they talk about sales commissaries, here in Washington, and the Secretary has provided that the articles be divided into two classes, certain staple articles that are sold at all the commissaries, in the Philippines, Alaska, and everywhere, consisting of the things that were sold at the commissaries before the war, or 10 years ago, and that the other innovations that have been set up here, like the meat market and vegetable market, and clothing shops, that we might call exceptional articles. He has directed that the first be sold under the act of 1884, i. e. without overhead charges, and that all these extras bear the entire cost of overhead, transportation, and everything else. So, if there could be something like that provided for, I think it would accomplish what most members of the committee wanted: that is, to stop these stores which are selling everything at the expense of the Government.

Senator WADSWORTH. The difficulty with this paragraph, as I see it, is that it will compel each and every commissary sales store to be run in such a way as not to incur any loss in that particular store.

General CONNOR. It might be so construed, or it might be construed that the whole service should be run so as not to incur any loss.

Senator WADSWORTH. No; it says "none of the funds appropriated in this act shall be used for the payment of expenses of operating sales commissaries."

I assume it means each and every store, sir.

General CONNOR. It could be construed to mean the group of them. If I might suggest that at the end of line 12 in there we would write in "within the continental limits of the United States where private stores exist within reasonable distance," we would then leave it so you could have these commissaries at isolated places, and if, then, after the word "delivery," line 14, be written "for all articles not comprehended within the provisions of the act of July 5, 1884," and strike out line 15, then that would mean that the commissaries would be back where they were, we will say 10 years ago, selling staple articles, except in Alaska and the Philippines, and I think we would accomplish all that was wanted by the conservative members of the committee, and certainly what the Secretary of War has directed be done after his investigation of the last six months.

Senator LENROOT. Is there any reason why the commissary should not be operated without loss to the Government even in the continental United States?

General CONNOR. If you stationed troops at Fort Huachuca, or even down in the Big Bend district, they are at stations where there are no stores.

Senator LENROOT. I am not talking about doing away with commissary stores. I am speaking merely about allowing something for transportation so the Government will not lose money.

General CONNOR. If a man went there in civil life, we will say if he lived in a mining camp, his pay is enough higher to meet those changes. If he is a \$5 a day man in New York where he can go around the corner and buy at the Piggly Wiggly, if he goes out to a

place that is way off from anywhere, so that things are brought in on a pack mule, his pay goes up to \$8 or \$9 a day, but in the Army there is no extra pay for such change in station, so the extra cost, I think, should be borne by the Government. I am economical about the Government funds, but I think when the Government sends a group of its people away with no increase in their pay over what they get in the ordinarily civilized and thickly settled places, when they get away 8 or 10 miles from a railroad, it seems to me no more than fair that the Government should transport the supplies to them, and give them to them at a reasonable price for that place. We certainly do it when we attempt to build a work like the Panama Canal. That is an extreme example, and nobody thinks of taking people to a place like that without standing the cost of transportation to those out-of-the-way places.

Senator WADSWORTH. What is the next, General Connor?

General CONNOR. The next paragraph is about the same. I have nothing particular to say about that. That applies to laundries, and that is about the only thing I can think of, and in most places laundries are not an essential; you can usually get a laborer or somebody living around to do that kind of work.

Senator LENROOT. The chief difficulty, General, that I see in these two paragraphs is imposing an impossible duty upon somebody, because this must be more or less of an estimate, and yet it will be a violation of the law if there is any mistake in judgment as to the price fixed. It seems to me it could very easily be covered by instead of having this rigid prohibition to have a requirement that in fixing the price it should be the cost plus estimated overhead.

General CONNOR. I should strongly urge that such places as Alaska and the Philippines, and out-of-the-way places in the United States where stuff has to be carried in wagons 8 or 10 or 20 miles, the cost of transportation be not included. If people want unusual things, charge them for those. I started the investigation of the Army stores here for the Secretary of War, so I am not trying to spend Government money; but I do think while there should be a reasonable protection for the Government there should be a reasonable concession to the employees where they are sent so far away.

Senator HARRIS. You say there are only a few of these things as to which you would make exception?

General CONNOR. But things change so I would leave it "outside of the continental limits of the United States, or within the continental limits of the United States at places where private stores do not exist." Take right down at Camp Humphreys, Va., for instance. Camp Humphreys is in a very settled region, and yet when I was there it was 11 miles from the nearest street-car line, and for people to buy their stuff in Alexandria and have the man haul it 11 miles to Camp Humphreys would put a tremendous added cost on it. That is just an illustration. The same way at Camp Meade. The isolated position does not mean isolated in regard to population, but where it is with respect to transportation facilities.

Senator HARRIS. I should think down on the Mexican border it would be rather hard on those men.

General CONNOR. Yes. Down there, in the days of the war on the border, you went in to buy a can of tooth powder that was plainly

marked 15 cents, and they sometimes would ask you 30 cents for it; and if you said, "Here, this says 15 cents," they would say, "Take it or leave it. We don't care whether you take it or not. We can sell it to somebody else."

SALES OF ANIMALS.

On page 30, line 21, the Secretary of War is authorized and directed to sell as soon as possible all animals not actually in use.

The annual wastage in animals is approximately $7\frac{1}{2}$ to 8 per cent, and it takes about six months to get animals, season them, and get them inoculated, etc.; so you are bound to keep 5 per cent of the number of animals in the service in your remount depots, seasoning them and getting them ready for issue. So if this proviso stands as written, there would be no reserve we could keep in the remount depots for seasoning and inoculation; so I would recommend that line 3, page 31, be written, instead of "in actual use," "not required for military purposes."

Senator LENROOT. That does not mean anything "required for military purposes."

General CONNOR. We are getting after it all the time, trying to reduce the number of animals in use.

Senator LENROOT. The present law covers that, does it not?

General CONNOR. This is what I say about this matter: The amount of money you appropriate for forage fixes the number of animals, and it is not necessary to have a proviso like that in there which makes an arbitrary disposition of animals. Right now the amount of money appropriated for forage of animals under regular supplies fixes the number of animals the Army can possibly keep, and a direction like that is not necessary. I would rather see it struck out than changed to "for military purposes."

Senator LENROOT. What would you say if instead of the words "actual use" he be directed to sell any in excess of a fixed percentage of those in actual use, say 5 per cent or something like that?

General CONNOR. Yes; but as I say, the amount you set up for forage under regular supplies will settle that. The amount you appropriate for feeding the animals will govern their number.

Senator WADSWORTH. This would really empty the remount depots, would it not?

General CONNOR. Completely; yes, sir. I do not know how it would be interpreted, but it might empty them of colts, mares, and everything else.

Senator WADSWORTH. It would empty Front Royal?

General CONNOR. All of them.

Senator WADSWORTH. We have a lot of brood mares there and stallions?

General CONNOR. Yes; it makes no exception. It says "as are not in actual use." It is too sweeping.

Senator WADSWORTH. It would close the breeding establishments!

General CONNOR. Yes.

Senator HARRIS. Following Senator Lenroot's suggestion that it be made not to exceed 5 per cent above what was necessary—

General CONNOR (interposing). That would be reasonable. That would put a limitation on the amount we could keep in reserve. But

wait a minute. We have many colts. You see, we are buying the colts of the mares that are served by the Government stallions, so we have about 2,000 mares and colts in the remount stations at the present time. If you write that 5 per cent, it ought to read "not including mares, colts, or stallions, for or arising from breeding." That is about 2,000. So if the 5 per cent were written in it ought to exclude those animals.

SALES OF CLOTHING AND QUARTERMASTER SUPPLIES.

Whatever the decision of the committee is on the two paragraphs that we discussed on page 27, the same ought to be the decision in regard to the item in lines 9 to 13 of page 32, "that hereafter the issue and authorized sales of clothing and other quartermaster supplies shall be at the average current prices, including all overhead costs, etc."

Senator WADSWORTH. That is legislation.

General CONNOR. If "including overhead costs" is left in, then "the issue" ought to be cut out, otherwise every soldier in the Army gets the overhead cost paid to him in his clothing allowance. He gets all the overhead, and it would be an unnecessary cost to the Government. Instead of getting what he gets now, all the overhead cost, or about 33 per cent, would be added, and it would cost the Government all the overhead which they would pay out to him as his clothing savings; and if "the issue" is left in, then the words "including all overhead costs" ought to be cut out.

Senator HARRIS. Mr. Chairman, if the general would send us such a statement as he things would help these provisos, I think it would be helpful to the committee, would it not, where he is asking us to cut out and change, unless you are keeping a record of the suggestions? It seems to me he should send us a statement for us to have before us.

Senator WADSWORTH. Of course it will be printed in the hearings, what he is now saying.

General CONNOR. I can concentrate the whole thing on a page or two and send it up if you so desire.

Senator WADSWORTH. I wish you would.

Senator LENROOT. What does the word "issue" in that connection mean?

General CONNOR. It means the issue of clothing to enlisted men. They obtain things in two ways; there are authorized issues or authorized sales. Suppose it is clothing. If a man does not use all his clothing, he has a saving, and he would get a saving that would include this overhead.

Senator LENROOT. So if the overhead provision stays in, the word "issue" ought to go out?

General CONNOR. Yes. Or if the word "issue" is left in, then "including all overhead costs" ought to go out.

INCIDENTAL EXPENSES OF THE ARMY.

General CONNOR. "Incidental expenses of the Army," page 32, line 14. The incidental expenses of the Army are largely matters of civilian employees and a few minor items like postage and telegrams—I think telegrams.

Senator WADSWORTH. Not telegrams.

General CONNOR. No; payment for apprehending deserters and clothing to discharged prisoners, etc. But the main item, probably 90 per cent, is for civilian employees, and that item does not change very much regardless of the size of the Army, whether it be 150,000 or 125,000, because that reduction is not accomplished by the suppression of posts or activities of the War Department so much as by scaling off in the company and battalion and regimental organizations, so that the incidental expenses stand about the same unless there is a very big cut in the size of the Army.

AMOUNT REQUIRED FOR ARMIES OF DIFFERENT SIZES.

Senator LENROOT. I wonder if you could explain to us, General, what the other offices could not explain. Your estimate on this item for 122,000 was \$5,000,000, for 134,000 the same, no increase, and for 156,000 an increase of \$365,000. Can you explain why there is no increase for 10,000 men in one case and an increase of \$365,000 for 24,000 men in the other case?

General CONNOR. The man who gave those figures made a mistake, because the figure sent up by the Secretary was a fixed figure for all three sizes. In the estimates that were carefully prepared the figure was the same for all three sizes of army.

Senator LENROOT. You think this is a mistake?

General CONNOR. I think so, undoubtedly. I know it is, because I made up the letter sending the estimates forward.

Senator WADSWORTH. These are for civilian employees of the Quartermaster Corps.

General CONNOR. Hire of laborers, Quartermaster Corps.

Senator LENROOT. Would you say a difference of 24,000 men would not make a change in the number of civilian employees?

General CONNOR. No; unless you concentrated it enough to do away with certain posts or to stop certain activities altogether. If you take the 24,000 men and divide them up, so many from the Coast Artillery, so many from the Infantry, and so many from the Cavalry and from each other branch of the service, and make the reduction so that you have no fewer regiments of Infantry and no fewer regiments of Field Artillery. Each of them will have had its organizations pared down a little, because in spite of the reduction we are trying to keep a nucleus of the Army together, and we do not do away with an entire regiment if possible to avoid so doing.

Senator LENROOT. If the posts were concentrated it would make a difference.

General CONNOR. Yes; if they are all concentrated, a few big regiments of Infantry and a few big regiments of Cavalry, etc.

Senator LENROOT. And if all the different branches were concentrated.

General CONNOR. It would, but you would then have no means of expansion in time of need.

Senator LENROOT. How many different posts are there?

Senator WADSWORTH. I think there are 276.

Senator LENROOT. Do you believe the number of stations we have is necessary?

General CONNOR. On the housing proposition we are getting back into the old posts, and, of course, there are not that number of sizeable stations—I mean of big ones. The cost of operating the big cantonments at the reduced strength has become prohibitive and the project now is to get back into the permanent Army posts, during the present summer, where the cost of upkeep will not be the same as it is in the cantonments. The cantonments are now five years old, and maintenance and repair is mounting up rapidly, and in the course of two or three years it will be prohibitive, because the underpinning is rotting and roofs are going to pieces. So it was decided to get back into the Regular Army posts as fast as we could, where the first cost of fixing them up after four or five years of vacancy will be considerable, but where the annual upkeep from then on will be small.

TRANSPORTATION OF THE ARMY.

On page 36 in regard to transportation of the Army the item set up in the Budget was \$21,000,000, which is about as small as we can get along with. This year we had about \$28,700,000, plus approximately \$6,000,000 or \$7,000,000 that the Secretary was authorized to transfer from other items—clothing and equipment, regular supplies, incidental expenses, etc. To get down to the \$16,000,000 passed by the House will practically—well, I think it will be an impossibility. I do not see how we can transport the food and supplies, etc., that will be necessary during the next year. If we get the present movements into the old posts made before the end of the fiscal year we have nothing in sight in the way of troop movements of any size for next year, but I do not see how we can run the show on \$16,000,000. I would strongly urge it be put back to the \$21,000,000 set up in the Budget.

There is no item that affects the whole Army so much, because it means the transportation of supplies and forage, getting recruits from recruiting stations to the posts; every man that is discharged you have to pay him an average of \$55 to \$60 to pay his way back home. And transportation affects the Army more than any one item I know of.

Senator LENROOT. The estimates given us heretofore by officers on this item have been, for an Army of 122,000, \$17,000,000 required; for an Army of 132,000, \$17,083,000; and for an Army of 156,000, \$21,000,000. In other words, practically no difference as to 10,000 men, but a difference of \$4,000,000 for 24,000 men. Can you explain that?

General CONNOR. No; I can not. I do not see how an estimate of such a small difference between the 115,000 and the 125,000 could have been set up.

Senator LENROOT. One of the officers said frankly he could not explain it. He said it was done by the Secretary of War, and that is why I am asking you these questions.

General CONNOR. No; I can not explain that. Transportation is an item that is very flexible. It is a question of the number of men you have, and I would say it would vary practically from 115,000 to 125,000, and then from 125,000 to 150,000 in the proportion of 10 to 25.

Senator WADSWORTH. This year, the appropriation act permits the Secretary of War to transfer to the account of transportation surpluses or reserves maintained or accomplished in other appropriations.

General CONNOR. In five other items; yes.

Senator WADSWORTH. And to that extent and to that extent only the quartermaster's appropriation has run up and you are about to finish spending a total of approximately \$34,000,000.

General CONNOR. About that.

Senator WADSWORTH. Of course, there was a good deal of that incidental to the discharge of 80,000 men.

General CONNOR. It is not all going to be spent.

Senator WADSWORTH. What do you think you will spend this year?

General CONNOR. Well, up to date we have not dipped into that \$6,000,000 at all. There was set aside \$6,700,000 as a reserve fund. I do not think that has been gone into at all yet, and the Quartermaster General has set up an additional \$1,700,000 as savings to protect against a deficit on movement of freight that he wanted to move. That would make a total of about \$35,000,000 made available, and I do not see that we will spend more than \$2,000,000 or two million and a half during the rest of this year. In other words, I think advantage will not be taken of that proviso to a greater extent than approximately \$2,000,000. That will be about \$31,000,000 spent this year.

Senator LENROOT. General, is the cost of transportation of a man on his charge equal to the transportation charge for a year if he remains in the service?

General CONNOR. It has averaged during the last year \$55. The cost of transportation per enlisted man in the service this year has been about \$200, and that includes, of course, the money paid these men for discharge.

I was going to ask a few pages further over to go back to the old phraseology of the appropriation act of 1918 and ask to be allowed the "general appropriation" of the Quartermaster Corps that we failed to get last year and in place of which we got this permissive proviso.

Senator WADSWORTH. You got it as far as rail transportation is concerned?

General CONNOR. So far as rail transportation is concerned, but this year we had more money than we needed in motor transportation, and it came to a point where we could not transfer any money from the money appropriated to move things by motor vehicle and use it for rail transportation, because the item was set up separately, and finally it took an act of Congress to authorize us to transfer about \$500,000 from motor transportation to rail transportation.

That "general appropriation, Quartermaster Corps." is a very desirable thing in so far as the bookkeeping and the reasonable operation of the Army is concerned. We will say the total appropriation is \$73,000,000, you can set up 10 per cent, \$7,000,000, as reserve, and you do not have to bother about each little reserve on each different item, and the ease of handling the Army appropriation and in the bookkeeping can hardly be exaggerated if we had that "general appropriation, Quartermaster Corps."

Senator WADSWORTH. The House bill this year does not itemize transportation?

General CONNOR. No.

Senator WADSWORTH. The current act does.

General CONNOR. Last year it itemized incidental expenses; this year it does not. So there seems to be no rule about it.

Senator WADSWORTH. Oh, there is no rule.

General CONNOR. So far as I am concerned personally it would be easier for me if you would set up every one of these items, because then I would have nothing to do. If you do not fix the allotments for these items, the Secretary calls on the Chief of Staff, and we have to submit him a detailed budget showing how to divide up this fund. If we find that conditions change, we can change the set up, but if it is done by Congress, that fixes it once and for all and no change can be made. The amount of work saved for the people who have to handle the matter, the ease of operation, and the economy leaves me with no doubt that we could operate for 10 per cent less if we had one sum than we could if it be set up under 100 different items.

Senator WADSWORTH. You do not think the temptation to spend all of each appropriation would overcome that 10 per cent?

General CONNOR. No; I do not think there is any economy in it. The different limitations work so as to block the whole machine at times. Just now, for example, if we want to do anything at a post, we have barracks and quarters money available, but have nothing for waters and sewers. If a house burns down at Fort Meyer we have money enough to rebuild the house if we leave out the water connections and plumbing connections. In other words, we have not anything in water and sewers, and yet we have a general reserve of several hundred thousands of dollars in barracks and quarters, but we can not spend barracks and quarters money for plumbing connections. That is why it is so difficult to handle. Congress contemplates the expenditure of a certain amount of money, and then these provisos prohibit it from being spent. That is where we stand on barracks and quarters and water and sewers to-day. We now have a bill in Congress asking for a special act of the Senate and the House bill make \$530,000 available out of barracks and quarters so we can use it for plumbing and purchase of water at posts, and repairs to sewers. You know those are things that can not wait if you get into trouble.

Senator LENROOT. We gave you too much for barracks and quarters this year?

General CONNOR. We did not know what we were going to do with the Army, and we have been hoarding it up to the end of the year, but the water and sewers money is all gone.

Senator WADSWORTH. I do not see how you could estimate on these things with the Army in a state of flux.

General CONNOR. I know you can not exactly, but we are trying to get back where they will not flow so much, for by the end of this year, I think, we will have the Army back in permanent posts. We have pretty good figures on the costs for the five years preceding the war, and we multiply by the general factor for the increase in cost of living, taken for the various groups, and we may get 166 per cent, of something like that, and that is the best guess you can make. You can not do anything else. I mean it is an educated guess, if you want

to use that term. It is based on five years' experience before the war modified by present cost of living, wages, and material.

The provision for the general appropriation, Quartermaster Corps, I recommend be put in, if possible, at the bottom of page 44, line 20, just after the end of all the quartermaster appropriations except for his office. I will submit a draft of it.

MILITARY POSTS.

Senator WADSWORTH. General, may I ask you about an item which appears on the bottom of page 39, under the head of military posts?

General CONNOR. I just sent to see if I could get word from General Harbord as to what I was to say about that.

Senator WADSWORTH. I recollect what he said.

CAMP BENNING.

General CONNOR. I left a memorandum for him and I asked him to telephone me. As the item stands we have \$400,000 for Camp Benning, and there was \$85,000 set up for Camp Knox, and the Secretary recommended the whole amount be combined, and that there would be \$485,000 for Camp Benning.

Senator WADSWORTH. The appropriation is \$916,000. Now, I notice on line 25, \$262,000 of the \$916,000 is for general construction at Camps Dix, Meade, and Lewis.

EDGEWOOD ARSENAL.—CONSTRUCTION WORK.

General CONNOR. That is the item I want to get a release on. I think the recommendation to make that Edgewood Arsenal will be approved by the Secretary, and a letter is directed to the Director of the Budget to come through the usual channels to you gentlemen recommending that be changed to Edgewood Arsenal. That is the information I was waiting for.

The point is that Camps Dix, Meade, and Lewis will not be kept as stations after this summer, and inasmuch as the House had made a certain appropriation for those camps, we wanted to get it transferred to some place where it could be used in getting the Army back in permanent quarters, and Edgewood Arsenal was the place I had recommended.

Senator WADSWORTH. I would like to have you prepare to discuss that and its importance under the new disposition.

General CONNOR. Which one

Senator WADSWORTH. Edgewood.

General CONNOR. As compared to other institutions?

Senator WADSWORTH. And the reasons for it.

General CONNOR. The reason that I put it up is at Edgewood we have 16 concrete barracks, each of them built to hold 135 men: there is light and power, heat, sewerage, and roads, and everything there except a few auxiliary buildings, like stables, gun sheds, and officers' quarters for a big garrison. We have an artillery range there of 15,000 or 16,000 yards, and it is an ideal post for a regiment of field artillery. We need such a post in this vicinity, and our plan is to put about a regiment of Artillery troops and a battalion

of Infantry there for this Third Corps Area. We have so much of the permanent construction there that it is an economical proposition to make more use of that reservation. The Chemical Warfare Service is bound to keep on to a certain extent, and they occupy a portion of the post. For instance, they are now spread out over four or five of those barracks, but there are about 12 other permanent concrete barracks there that could not be built for \$50,000 or \$60,000 apiece, at least, and we want to take advantage of that permanent construction. That is why Edgewood was asked for. I simply concentrated on that place.

Senator WADSWORTH. You are contemplating asking for \$292,000 for that?

General CONNOR. I am going to ask for the original budget of \$376,000, which it was before it was reduced.

Senator LENROOT. You see the point. You were asking for exactly the estimate that you were asking for for the other camps. Is not that more than sufficient, based on the conditions at Edgewood?

General CONNOR. No; the amount has been fixed in the letter from the Director of the Budget, and the Secretary could not ask to increase his Budget recommendation, so I simply cut out everything there was except up to the original figure in the Budget estimate.

Senator LENROOT. I mean ought we not to know how much is necessary to put the barracks at Edgewood into condition and not be asked to assume that because the appropriation for three other posts was made, just that amount is going to be required at Edgewood?

General CONNOR. I would not give you that idea at all. It will fix the post up practically in a livable condition, but I would not lead you to the idea at all that that would be the only sum spent there.

Senator LENROOT. Ought we not to know what is required to put it in fair condition for the use you contemplate putting it to for this coming year and give you that sum, whatever it is, if it is within the estimate?

General CONNOR. Our position is this, that we can get them in there and it will be comfortable, and their condition will be a great deal better than it has been for the last five years, and they will have to get along with it. That is the proposition we are going on.

Senator LENROOT. The chairman and I visited those barracks a short time ago and found them in good condition.

General CONNOR. Yes; the barracks are in splendid condition. There is nothing to be spent on them except to put on four kitchens which were not completed—a very small item, but they are simply barracks and nothing else. We would have to have stables, gun sheds for the artillery, and we have to convert several buildings to make officers' quarters because, while the barracks are there, there are no officers' quarters; and certain buildings will have to be partitioned inside and fixed up with plumbing and heating for officers' quarters. And then, as I say, they will be much more comfortable than they are at Meade and much more comfortable than the Army has been at any of these camps for a long time.

Senator LENROOT. I do not want it to be taken for granted that asking for a certain sum for construction at a certain point is sufficient to get that sum for construction at an entirely different point.

General CONNOR. I see what you mean. But the Secretary had asked for a certain sum that had passed the Budget officers and he simply switched from the three posts mentioned to a new post where he is going to spend the money.

Senator WADSWORTH. Did the Budget itemize this into these several projects?

General CONNOR. The Budget itemized them, \$400,000 for Benning, \$85,000 for Knox, \$376,000 for the three camps mentioned, and \$55,000 for Letterman General Hospital. Then, we decided we were not going to keep Knox next year, and the Secretary wrote, asking to have the \$85,000 added to the Benning estimate, and he then wrote another letter asking that \$198,000 be added for the barracks at the general prison at Leavenworth and another letter will come up, if he signs the letter I submitted to him this morning, asking that this item for the three camps be switched to make it available at Edgewood Arsenal that I speak about.

Senator WADSWORTH. Do you happen to know how much of a barracks they have for the guard at Leavenworth?

General CONNOR. No; that is a prison proposition. I know it stood for some time at the head of the Quartermaster General's priority list.

Senator WADSWORTH. Do you know how much they spent for it?

General CONNOR. No.

Senator WADSWORTH. Do you know the size of the guard?

General CONNOR. No; it is a prison activity.

Senator WADSWORTH. It is not a prison; it is a barracks for the guard.

General CONNOR. It is a guard at the prison.

Senator WADSWORTH. Yes.

General CONNOR. I can give you a statement in regard to that:

This guard is about 400 men. The Chief of the Construction Service states that these barracks were started about 1917 by prison labor, but owing to reduction in number of prisoners and press of other work were only finished as to foundations. Barracks are badly needed and the estimated cost of completion is the \$198,000 herein asked for. The wording, "for continuing construction, etc.." was adopted so as to facilitate the settlement of money accounts.

Senator WADSWORTH. I see this item is for continuing construction, which, of course, implies we have already spent some money there and are going to spend some more.

Senator HARRIS. Mr. Chairman, as I recall, he said there were over 400 guards and only 1,500 prisoners, which would seem rather large.

General CONNOR. I can give a memorandum on that which will give the information you desire.

Senator HARRIS. General Connor, some time ago the Secretary of War called my attention to the fact that the building used for a post office at Camp Benning is so dilapidated that it is rather hazardous to use it. I wonder if you want to say anything about that.

General CONNOR. The building down there is an improvised building, and a request came in to spend about \$20,000 for a new post office at Camp Benning. I recommended it be disapproved, because the officers with their families are living in tents. I figured that the post office, that had a wooden roof over the top of it, was in better condition than the officers and men in tents were, and I would not

recommend any money be spent for the post office when men, women, and children were living in tents. It did not strike me as reasonable.

General Harbord is in with the Secretary now, and I will be able to say whether he approves of the shift from the three camps to Edgewood Arsenal or not.

Senator HARRIS. Where is Edgewood Arsenal?

General CONNOR. Fifteen or eighteen miles northeast of Baltimore.

BARRACKS AND QUARTERS.

General CONNOR. Under barracks and quarters, on page 41, line 11, I strongly urge the amount be written back to the amount in the Budget of \$4,479,016.

Senator WADSWORTH. The Budget?

General CONNOR. Yes.

Senator WADSWORTH. I make it \$3,979,000.

General CONNOR. That was readjusted in a letter the Secretary wrote asking to have it made \$4,479,000. It was originally \$3,979,000, and then the Secretary wrote a letter asking to make certain alterations in it, i. e., a rearrangement of amounts without changing the totals.

Senator HARRIS. You want furniture included in that?

General CONNOR. The Quartermaster General undoubtedly brought up that point. I am quite sure it was originally submitted on the figure you gave, and then the Secretary wrote a letter and the final figure was the amount I gave, \$4,479,016.

Senator HARRIS. General Connor, do you not think if the troops are concentrated that after the first year the expense will be greatly reduced?

General CONNOR. How do you mean?

Senator HARRIS. Concentrating them in the larger posts and abandoning the smaller posts?

General CONNOR. We have not any posts to put them in. If you could administer a division in a big camp like Meade or Dix, yes; it is easier of administration, and would be cheaper, if you had a permanent construction, but the item of construction would be a very large one, in order to let us go ahead and build an entire division camp.

Senator HARRIS. There are posts you are going to abandon if you add that sum?

General CONNOR. The trouble is if the Government wants to buy it can get things at a very high price; but when it wants to sell there is no price coming at all; and, of course, the money received for sales has to go back into miscellaneous receipts. An institution built for an Army post has not a very great commercial value, because nobody else wants to run an Army post. Therefore, you do not get your money back at all. But there is no doubt but what getting back into the old Army posts is going to be a tremendous saving over the last two years' cost of upkeep of the camps, and we have just been forced to do it, and really to do it on the run, while we can do it with the rail transportation funds we have available. The first cost of getting into these posts will be a considerable amount, to get them in shape; but after that the upkeep will not be great.

REVISED ESTIMATE.

Senator LENROOT. General, did the Budget make a revised estimate for this?

General CONNOR. Yes; I have given those figures that have been approved and forwarded.

Senator LENROOT. And what was that amount?

General CONNOR. \$4,479,016.

LEAVENWORTH CONSTRUCTION WORK.

Senator LENROOT. I would like to ask about Leavenworth. I do not find anything in the House hearing on that Leavenworth item. Where does that come in?

General CONNOR. They started some time ago, according to my understanding, to build a couple of barracks, or a barracks for a couple of companies of the prison guard at Leavenworth. For some reason or other the work has not been finished, and the list of priorities that the Quartermaster General had on priority of construction had this item at the head of it. We did not put it in at first, and later it was pressed, and the Secretary of War wrote a letter asking to have \$198,000 included to finish this barracks for the guard of the disciplinary barracks at Leavenworth.

Senator LENROOT. Do you think that will complete it?

General CONNOR. That is my understanding.

Senator LENROOT. The language is "continuing construction." It does not say completion.

DONATIONS OF LAND.

General CONNOR. On page 53 after line 6 in the bill as submitted to the House, there was a proviso authorizing the Secretary of War to accept property from municipality, civic organization, or anybody who wanted to donate property, either in fee simple or to give them a leasehold interest in it, when in his judgment the national defense interests were promoted thereby, and used it for air service or any other purpose that might promote the national defense.

I recommend that that proviso stand. It has been understood, I believe, that the Government is prohibited by law from accepting free service from anyone, but gifts have been accepted, and this would clear it up. Let him accept flying fields or any area he thought was needed for the national defense as a donation.

Senator LENROOT. This proviso seems to go further.

General CONNOR. You have the proviso there?

Senator LENROOT. Yes. It not only authorizes the Secretary of War to accept donations, but it authorizes the Secretary of War to establish, maintain and operate thereon facilities for flying, and such other installations as may be necessary for the national defense.

General CONNOR. He has got to have that authority, but he can not do anything without money. About a year ago we got a special proviso in the act in regard to inland waterways. The Government could not spend a cent on a piece of land it did not own, and it took a special act of Congress to authorize the Government to spend any amount of money whatsoever on leased land for a river terminal for

use in landing its boats. That was one breakaway from it. This authorizes the Secretary to spend money on a piece of land in which he gets a leasehold interest or tenure for some length of time, and it does not necessitate the Government owning it in fee simple. He can not build anything without money.

Senator LENROOT. But if we make a lump sum appropriation here out of which he is given authority to establish these plants all over the country, what control have we?

General CONNOR. You make a lump sum appropriation and you haven't any more control except the belief he is doing what is right. But he could do that everywhere now except at some particular place where he only has a leasehold and does not own the land outright.

Senator LENROOT. Establish new plants?

General CONNOR. Yes; if he has got the money for it. He can not spend on an ordinary building more than \$20,000, and on a hospital building he can not spend more than \$30,000. He is limited by law as to the cost of any single building, and there are other limitations that would hold him down.

Senator WADSWORTH. That is a grave question of policy. That proviso would permit the Secretary of War to accept fee simple on a piece of real estate.

General CONNOR. That is the substance of it.

Senator WADSWORTH. Giving blanket authority to the Secretary of War to accept real estate and take over title to it in the name of the Government would build up a series of ever-lengthening obligations which the Congress will be importuned to carry out. The Secretary of War in the future may come to Congress and say, "The city of Philadelphia has given the War Department, and I have accepted from it, 300 acres of land outside the city for an air station or landing field; they have done it on the faith of the Government; that the Government will put up some hangars there and maintain a facility and service not only for military operations but for civilian aircraft"—and that is one of the things back of this scheme?

General CONNOR. Yes; undoubtedly.

Senator WADSWORTH. So Congress, without having any opportunity to pass on the project in the first instance, will find itself compelled in years to come to appropriate ever-increasing sums for carrying on those projects.

General CONNOR. I do not press it at all. I do not believe he could obligate any expenditure. It was simply authorizing him to accept a gift for the Government, and it was in the original bill. I was explaining that he could not now accept anything for national defense, whereas he can accept land for a river terminal on the Mississippi River, for instance.

Senator WADSWORTH. I think myself some instance will arise in the future, and perhaps exists to-day, where it will be wise for the Government to take a leasehold or fee simple on a piece of land.

General CONNOR. I do not push it at all.

Last year the bill carried an authorization that hereafter the cost of transportation of raw products to the fabricating place could be paid out of the appropriation for the fabrication. The Air Service asks that that authority be extended to them. It was applied to the Ordnance Department and Chemical Warfare Service.

Senator WADSWORTH. Was that done by special act?

General CONNOR. No; a proviso in the appropriation act of last year, and it is a continuing law, because it says "hereafter."

Senator WADSWORTH. I recollect, General, quite well, introducing a bill in this session of Congress sometime last autumn or winter authorizing payment for transportation of manufactured articles out of the appropriation for the purchase of the article, and it went through the Senate. That applied to ordnance.

General CONNOR. Ordnance and Chemical Warfare, as the law now stands.

Senator WADSWORTH. I think myself it is sound.

General CONNOR. It is. It is not properly Army transportation. There is no way for us to estimate where the raw products come from. It is part of the original cost. You appropriate so much to manufacture these things. If the Air Service ask for it I would suggest it might be put in. I will submit a draft as it should come in the bill when I make my written report on proposed changes.

EDGEWOOD ARSENAL CONSTRUCTION WORK.

I have just received a message from the War Department that the Secretary of War has signed that letter asking to have that \$376,000 that was in the Budget, the \$262,000 passed by the House, for those three camps, page 40, line 1, transferred for use at Edgewood Arsenal, and that letter will come along through the Director of the Budget.

Senator WADSWORTH. With the proper wording?

General CONNOR. Yes, sir.

RESTRICTIONS ON APPROPRIATIONS.

On page 103, lines 1 to 7, "no part of the moneys appropriated," etc., ought to come out, because on page 102, lines 10 to 18, it allows a leeway of 25 per cent in the cost of the purchased article, and that allows, for instance, the Ordnance Department to keep alive some plant by giving it work enough to keep a nucleus together, whereas if this second proviso is written in, which does not provide for the 25 per cent, it would stop us altogether from keeping such private agencies going. The two provisions seem to be in conflict. One allows 25 per cent leeway in the Government cost and the other does not.

Senator WADSWORTH. How are you ever going to calculate that, anyway?

General CONNOR. They know what the costs of certain things are. They know what it costs to produce powder at the Government arsenals, and they know what it costs to produce certain other equipment.

On many things which we never have manufactured we have no data at all, and that does not apply, because it says "is or has been." But the second one certainly should go out.

SURPLUS OR RESERVE STOCKS.

On page 131, line 7, we have that question of reserve stocks again, and in lines 8 to 11 there is another matter I would like to mention. I think it is an echo of the committee's report

on Panama Canal conditions. The President issued an Executive order that beginning January 1 rents should be charged on dwellings down there. The committee recommended that everybody be charged rent; but some men, like superintendents and other men not in the class that belong to labor unions, etc., had never had their pay increased through the war, whereas the others—carpenters, plumbers, and men belonging to the trades—had had their pay shoved up until some of them were right up on the superintending class. In order not to make any difference between the two we recommended that all pay rent; but to make up that amount to the several grades where no increase had been given in pay for some time we recommended an increase in pay equal to the amount they would be required to pay for rent. This provision on page 131, and a similar one on page 132, lines 1 to 3, where the date July 1 appears, would put those people back on the same rate of pay they had last June 30, and still they would be paying rent, whereas most of the artisans and workmen down there have had their pay increased practically double during the war, and only a few people did not. It seems to me that might be struck out.

Senator WADSWORTH. Where is the language, General?

General CONNOR. Page 131, lines 8 to 11, in the committee print, and the last line on the same page, "nor shall there be paid to any such person" down to and including "July 31" of line 3, page 132. The only people I can think of they refer to are the people whose wages were raised to meet the rental.

Senator WADSWORTH. Do you want to ask any questions?

We are much obliged, sir.

STATEMENT OF COL. B. H. WELLS, ASSISTANT CHIEF OF STAFF, WAR PLANS DIVISION, AND OF COL. J. L. DE WITT, ON DUTY IN THE WAR PLANS DIVISION.

Senator SUTHERLAND. Colonel Wells, what item do you wish to speak about particularly?

Colonel WELLS. I should like to speak about certain matters relating to our garrisons in the Panama Canal Zone, Hawaii, and the Philippines.

Senator SUTHERLAND. On what page of the bill is that found?

Colonel WELLS. You will not find it on any particular page. It is carried all through the appropriations. I will later come to each specific item included in the Budget.

Senator SUTHERLAND. Proceed in your own way and tell us.

Colonel WELLS (reading):

It is, of course, obvious to the committee that the garrisons for these possessions must be furnished from the Regular Army. There is no National Guard in the Philippines or Panama and only a small organization in the Hawaiian Islands.

The defense of these valuable and important possessions constitutes one phase of the mission of the Regular Army.

There has been a great deal of discussion and study of the forces necessary to adequately defend these possessions and the attempt has usually been made to reconcile the needs of these places with the needs for Regular Army soldiers within the continental United States so that provision for both needs could be met. With varying restrictions on the size of the Army, the results have not been satisfactory. The requirements of our overseas garrisons have never been filled.

In the formulation of a defense plan, the troops necessary to execute it must be stated and the facilities with which the troops work must be provided. By facilities I mean such things as ships, bases, fortifications, roads, railroads, quarters, storage, etc.

Our object in peace is to calculate the amount and disposition of these facilities necessary for particular localities.

The Joint Army and Navy Board, in its report of May 22, 1920, stated:

"From a study of probable enemies and plans considered most urgent, certain elements stand out as more important than others. This is especially true with regard to bases and fortifications, both of which concern the two services and involve joint action. Their priority should be established by the joint board."

The joint board then stated the order of priority of pending projects as follows: (1) Oahu (Hawaiian Islands), (2) Guam, (3) Panama Canal.

Based on these priorities the War Department has completed the defense projects for the Hawaiian Islands and the Panama Canal, known as "The Oahu defense project" and "The defense project for the Panama Canal," respectively.

By "project" I mean a statement of the means that are necessary to execute a plan of defense. [Reading:]

No further reference will be made to the project for the defense of Guam because no items for such a project are included in the Budget, and because under the provisions of the naval treaty the subject does not concern us for at least 10 years to come.

I think it may be well to consider the two projects mentioned, in more or less detail, and with this view in mind will first present

THE OAHU PROJECT.

There are eight main islands in the Hawaiian group. It is manifestly not necessary or desirable that all of them be fortified.

Oahu, because of its strategic location and the fact that it contains the naval port of Pearl Harbor and the commercial port of Honolulu, is at once the most important island not only of the Hawaiian group but in the entire eastern Pacific Ocean. It is the only island of the group upon which fortifications are maintained. Its importance early became apparent to our Navy, which in 1874, obtained from King Kalakaua a concession for the use of Pearl Harbor as a coaling station. Since the annexation of the islands, Pearl Harbor has been developed into an important naval base with a large dry-dock, shops, radio station, etc., and at the same time measures more or less adequate have been taken for its defense.

Situated at the crossroads of the Pacific Ocean, 2,100 miles from San Francisco, 2,000 miles from Dutch Harbor, 4,600 miles from the Panama Canal, 3,300 miles from Guam and 4,500 miles from the Philippines, Oahu occupies a position of immense strategic importance in our scheme of national defense. Primarily it affords a protection to our entire west coast from Alaska to Panama. Without first capturing Oahu it is not likely that any naval force from the western Pacific will venture across the five or six thousand miles of ocean to our coast. The steaming radius of no fighting ship afloat will warrant it, nor will any modern navy willingly pass by and leave an important enemy naval base flanking its line of communications. An enemy once in possession of Oahu will threaten our entire coast from Kiska to Panama. There is perhaps reason enough that we should defend Oahu for itself and the rest of the Hawaiian group, but fortifications there also greatly lessens the expense of other fortifications on the American mainland. The importance of Oahu is not limited to the protection that it affords our west coast. It also plays a vitally important rôle in the defense of our more distant possessions in the Pacific. At present it is our most western naval base and would be the first stepping stone for our Navy in advancing to the defense of the Philippines or the support of American policy and commercial interests in the Western Pacific.

The defense of Oahu is to be provided, first, by the Seacoast Artillery which has been and is being emplaced along the south side of the island to protect the Pearl Harbor base and the city of Honolulu from naval bombardment, and, second, by a force of mobile troops stationed near the center of the island at Schofield Barracks and which has the mission of preventing an enemy from

effecting a landing at any point upon the island. This mobile force is to consist of an infantry division with some additional mobile artillery and Air Service units. We have learned from our recent experiments to appreciate the possibilities of aircraft in coast defense, but we must not conclude that aircraft alone is sufficient for that purpose. An enemy attempting to land from small boats must be met on the beach by infantry with machine guns supported by mobile artillery.

The mission of the garrison is (1) to defend the naval base at Pearl Harbor against damage from naval or aerial bombardment; (2) to prevent damage by enemy sympathizers; (3) to meet attack by enemy expeditionary force or forces, supported or unsupported by an enemy fleet or fleets.

For many years the question of the proper size of the garrison for performance of the mission of the Regular Army in Oahu has been studied. It is still receiving careful investigation, but the General Staff believes that sufficient data has now been procured and that our experience has been such as to warrant definite decision with respect to the minimum peace-time garrison. It is possible, in time of war, to reinforce the peace garrison with certain elements, but the special location and nature of the problems in Oahu do not justify depending upon reinforcements here in the same degree we may depend upon them in other localities.

With respect to various units comprised in the garrison they should be the same in peace or war. They are needed there in peace to become familiar with the problems confronting them and to train in the atmosphere and surroundings where they would be expected to operate in an emergency. Various department commanders have given careful thought to the size of the garrison and have conducted practical exercises and maneuvers with a view of ascertaining what the minimum needs are. There has been a great deal of correspondence between department commanders and the General Staff on the subject with the result that the garrison has now been fixed as follows:

Authorized peace garrison.

	Commiss- ioned.	Warrant.	Enlisted.
1 department headquarters.....	23	13	5
1 division headquarters.....	24	12	51
2 Infantry brigades, headquarters and headquarters company.....	12	2	68
4 Infantry regiments.....	220	4	5,248
1 Field Artillery brigade (three regiments).....	168	4	3,177
1 Engineer regiment.....	26	1	710
Air Service:			
1 observation squadron.....	31	0	132
1 pursuit squadron.....	23	0	132
1 bombardment squadron.....	40	0	132
1 group headquarters.....	4	1	35
2 balloon companies.....	16	0	200
1 air park.....	5	0	172
1 photo section.....	1	0	20
1 branch intelligence office.....	1	0	5
Medical Department:			
1 medical regiment.....	24	1	277
Miscellaneous for hospital and detachment.....	72		397
Quartermaster Corps:			
1 division train.....	9	0	223
1 bakery company.....	1	0	21
1 bakers' and cooks' school.....	1	0	18
Miscellaneous.....	12	5	250
2 motor repair sections.....	2	0	36
Special troops, Infantry division:			
1 headquarters.....	3	0	8
1 headquarters and military police company.....	4	0	109
1 signal company.....	6	0	150
1 light tank company.....	5	0	105
1 motor cycle company.....	1	0	36
1 ordnance maintenance company.....	1	0	48
Coast Artillery:			
1 district headquarters.....	5	0	5
Fixed and mobile defenses and antiaircraft.....	127	2	2,995
Staff:			
1 signal company (service).....	3	0	60
Finance.....	1	0	22
Ordnance.....	0	0	90
Chaplains.....	12	0	0
Total.....	893	45	14,937

In war, or when war is imminent, the peace garrison will be raised to war strength and increased by additional air units from the United States and from personnel available locally.

The authorized war garrison is approximately 30,000 officers and men, which number includes about 3,000 National Guard.

FIXED DEFENSES.

In addition to the existing fixed defenses the following armament has been authorized: A battery of heavy guns to be installed as indicated at this point on the relief map before you. And certain field guns, railway mortars, and anti-aircraft guns.

The project is based on the following:

(a) The Hawaiian Islands are of vital military importance only as a naval adjunct.

(b) Pearl Harbor and Honolulu Harbor provide bases from which the fleet may control the eastern Pacific and protect the west coast of the United States, Alaska, and the Panama Canal.

(c) The use of Pearl Harbor as a base for the fleet requires control of a sea area of such size adjacent to the harbor as to permit the fleet maneuvering to enter or debouch therefrom.

Senator HARRIS. Is there any part of this that you do not wish to have go into the record?

Colonel WELLS. I have General Pershing's permission to give it as I am giving it here, leaving it to the committee to determine what part shall be made public. General Pershing is anxious—and so is the Secretary of War—that the members of the committee shall know exactly what we are doing, and what we propose to do, and what the project is, not only for this year but for the future, and then to show the part of the project which we are asking for this year, and to show how it fits into the plans for the future.

Senator SUTHERLAND. Then, unless there is something to be kept in strict confidence, you will let it go into the record?

Colonel WELLS. Yes.

Senator HARRIS. When you revise your remarks you can cut out anything that you desire.

Colonel WELLS. With the permission of the committee, I think that will be the best way. I will present the whole project now for your information, and then cut out such parts from the record as should not be published.

Senator LENROOT. But those that you feel can remain in, and you think of value to the Senate, you can leave in the record.

Colonel WELLS. Yes, sir; I will leave the greater part of it in the record. My next point is [reading]:

(d) The battle fleet must be free to operate against enemy forces in its proper function of controlling, or fighting to gain control of, vital lines of communication.

I might say in this connection that I have heard the question asked several times, what is the use of any military force over there since the Navy is protecting the island? That is just what we want to get away from—the idea that the fleet is going to take care of the island. The island must be held by military forces, so that the fleet may be free to operate on the lines of communication and against the enemy's main fleet. [Reading:]

(e) Naval support, available to assist in the defense of Oahu, will be limited to the local forces provided for in existing plans. If, however, the naval situation warrants, this force will be augmented by additional submarines in case of threatened or actual attack.

(f) In a war with a single power lines of communication with the United States will be kept open by the Navy.

(g) In a war with a two-power coalition, the Navy may not be able to control lines of communication after a period of three months from the declaration of war. Such lines will be subject to interruption from the outbreak of hostilities.

(h) Reserve supplies, reserve ammunition, etc., are based upon requirements for a self-sustained defense for a period of four months.

(i) The plan for defense of Oahu provides for the prevention of the closing of Pearl Harbor and Honolulu Harbor by enemy blockships.

Supplies.—A four months' supply of all classes of supplies for maintenance of men and animals and matériel necessary for construction of temporary shelter and defensive works, other than fixed defenses, together with hospitalization and repair facilities for the war garrison. In addition to these war reserves there is kept on hand at all times two months' supplies for the actual existing Regular Army garrison.

Here is an estimate of the amount that is necessary for construction to complete this project under various heads. [Reading:]

Estimated amount necessary for construction to complete project.

(a) Fortifications (heavy gun battery, as indicated on map) -----	\$335,000
(b) Shelter -----	6,426,500
(c) Storage -----	800,770
(d) Air Service (Luke Field) -----	267,000
(e) Water supply (Ku Tree Reservoir) -----	500,000
(f) Refrigerator plant -----	231,500
(g) Water-purification plant -----	600,000
(h) Military roads (91.3 miles) -----	5,279,000
Total -----	14,489,770

These figures, it should be noted, represent the amount necessary to complete the project—not the amount asked for next year.

Prior to the present no definite plan looking to the completion of construction has been stated to Congress, but the entire project is now prepared. It is believed that the committee should know what the War Department plans are, and it is recommended that the project be completed by extending the construction over a period of years. With the exception of one heavy gun battery now under construction all of the fixed armament required is already in place. The major part of the sum stated is needed for storage of reserve supplies, for barracks and quarters, and for certain roads to afford rapid access to beaches that are favorable landing places for an enemy. The necessary facilities should be installed as early as practicable. The War Department desires the project completed by annual appropriations of about \$2,600,000 a year for five years following 1923. For the fiscal year 1923 the amounts asked for have been reduced to bare necessities.

Amount asked for fiscal year 1923.

(a) Fortifications -----	\$335,000
(b) Shelter -----	None.
(c) Storage -----	659,490
(d) Air Service (Luke Field) -----	None.
(e) Water supply (Ku Tree Reservoir) -----	200,000
(f) Refrigeration plant -----	200,000
(g) Water-purification plant -----	None.
(h) Military roads -----	210,500
Total -----	1,604,990

Senator HARRIS. On what page in the bill is that?

Senator SUTHERLAND. Page 40.

Senator HARRIS. On the margin of the bill the amount stated is \$1,059,440.

Colonel WELLS. That figure is for storage water supply and refrigeration plant only. Add to it the amounts asked for fortifica-

tions, \$335,000, and for military roads, \$210,500, and you will have \$1,604,990, the total asked for the fiscal year 1923. As I have shown above the total project is going to cost \$14,000,000 eventually.

Senator HARRIS. I thought you said \$2,800,000 would be necessary to complete it in a certain time. Did I misunderstand you?

Colonel WELLS. \$2,800,000 a year for five years after 1923.

Senator HARRIS. That is after this year?

Colonel WELLS. Yes.

Senator HARRIS. The amount here stated will be sufficient for this year, then?

Colonel WELLS. Yes.

Senator LENROOT. Is that for Schofield Barracks?

Colonel WELLS. It is for the whole island.

Senator LENROOT. This construction that this \$1,059,490 will cover, where will that be?

Colonel WELLS. Part of it at the Schofield Barracks and part of it at the ordnance depot near Honolulu.

Senator LENROOT. You had \$520,000 this year for this purpose, did you not?

Colonel DE WITT. That \$520,000 for this year was for the construction of barracks and quarters for the shelter of one regiment of Field Artillery. There is no money being asked for any shelter this year. It is all for storage, with the exception of the refrigerating plant and the reservoir.

Senator LENROOT. Is the refrigerating plant included in this \$1,059,000?

Colonel WELLS. Yes.

Colonel DE WITT. That also includes the water supply, \$200,000.

Senator LENROOT. This does not include any barracks and quarters?

Colonel WELLS. No.

Senator LENROOT. Do you go over again the items which make up this \$1,059,490?

Colonel WELLS. Yes; I am coming to that in detail. [Reading:]

Estimates for Hawaiian Department (Oahu defense project).

The Budget for 1923 (p. 478) includes the following items for the Hawaiian Department:

Military posts, Hawaiian Islands: For construction and enlargement at military posts in the Hawaiian Islands of such buildings as in the judgment of the Secretary of War may be necessary, including all appurtenances thereto (act of March 4, 1921, vol. 41, p. 1385, sec. 1, submitted), \$1,059,490.

Object of expenditure:

24 standard storehouses at \$9,000 each.....	\$216,000
Magazines for storage of war reserve ammunition.....	64,000
Shop for care and preservation of ordnance war reserve material at Schofield Barracks.....	18,000
5 sheds for Engineer material.....	85,625
Completion of ordnance storehouse area.....	57,000
Storage of fuel oil, gasoline, etc.....	218,865
Water supply, Ku Tree Reservoir.....	200,000
Refrigeration plant.....	200,000

Total 1,059,490

Senator LENROOT. What is the allotment for storehouses?

Colonel WELLS. \$216,000.

Senator LENROOT. What are you using now?

Colonel WELLS. I am covering that in detail in my statement. The Oahu defense project contains the following general instructions to govern storage [reading]:

The basis for war reserve supplies will consist of four months for the authorized garrison, including the Regular Army, National Guard, and 9,000 selective service men, totaling approximately 30,000. In addition to the war reserve supplies there shall be in the Hawaiian Department at all times two months' current supplies for the actually existing Regular Army garrison.

War reserve of supplies will be established only as storage facilities actually become available.

The department commander will submit requisitions for war reserve material and supplies at such times as to permit of their arrival in the Hawaiian Department when the storage for them has been completed.

The department commander will state on each requisition for war reserve supplies that the articles desired are for war reserves or the replenishment of the same, and that adequate storage actually exists.

In furtherance of the plan of defense of Oahu the project calls for storage facilities to meet the following requirements:

(a) Acquisition and storage in reserve of war materials required for preparing the land defense immediately after war is declared.

(b) Acquisition and storage in reserve of ordnance, signal, medical, air service, and general supplies for a self-sustained siege of four months for a force of 30,000 men.

(c) Acquisition and storage in reserve of material required for a stockade and for rear defenses of coast forts as part of a prepared plan to control hostile resident aliens upon outbreak of war.

Subitem 1.—Twenty-four standard storehouses, at \$9,000, \$216,000.

The details that I have included on this storage business were not given to the House committee, and for that reason I do not want to take any chance on their not getting before this committee. The only item that was covered in detail in the House committee was the cold storage.

Senator SUTHERLAND. The refrigeration plant?

Colonel WELLS. The refrigeration plant, and the House included an item for that. I am coming later to a statement which shows in parallel columns what we are asking for and what the House gave us, so that the committee can see the comparison. [Reading:]

There are now 25 standard storehouses constructed at Schofield Barracks, 16 of which are required for the local use of the Schofield Barracks peace-time garrison and are not available for war reserve storage, and 3 more are required for the storage of current engineer, medical, and signal supplies and equipment, making a total of 19 required for current peace needs of the garrison. There are, therefore, 6 storehouses now available for the storage of reserve matériel.

The storage requirements for reserve supplies that must be cared for in closed storage is approximately 2,600,000 cubic feet which equals the capacity of 30 standard storehouses, 6 being available. Twenty-four more are therefore necessary.

The storage requirements for the several classes of matériel are as follows:

	Storehouses.
Engineer matériel.....	2
Signal matériel.....	1
Medical matériel.....	1
Air Service matériel.....	3
Chemical Warfare Service matériel.....	1
Quartermaster matériel.....	22
Total.....	30

The necessity of immediately having closed storage on the island of Oahu is that all matériel requiring closed storage will deteriorate if stored in open or

unsuitable buildings. Storage is placed first on the order of priority because the garrison can not carry out its mission without reserves for matériel and, if proper storage is not provided, the matériel supplied will deteriorate in open or unsuitable closed storage to such an extent that the loss from deterioration, theft, fire, etc., will exceed, in a very short time, the cost of storehouses. The commanding general, Hawaiian Department, has repeatedly stated in letters and cables to the War Department that if storage can not be supplied he must nevertheless have the matériel. General Summerall has recently stated in this connection:

"I feel that it is imperative to have the supplies here on the ground at the earliest possible date, regardless of storehouses. If the troops out here are to function at any time they must be able to function instantly at all times, commencing with the present moment. * * * I am not so much concerned about our personnel as I am about the matériel and the munitions. While I am extremely anxious to have the garrison completed in accordance with the proposed plan, I feel that no time should be lost in shipping the matériel, without which the troops contemplated would be at a great disadvantage. Should an emergency arise, it is highly improbable that communications would at once exist with the mainland, and the uncertainties of sea warfare are such that the interruption might continue for a considerable time. We have only to consider the situation at Gallipoli to visualize what might easily happen here."

On the other hand, the War Department, and particularly the chiefs of supply branches, are naturally loath to ship valuable supplies for war reserve where they think the supplies can not be properly protected from loss and deterioration.

The question naturally arises as to whether or not there is any storage space now available in Honolulu that can be used or rented. The commanding general Hawaiian Department states that—

"There is no storage space now available where a minimum of loss from deterioration or other causes of supplies furnished can be guaranteed; nevertheless, we must have the supplies to properly carry out our mission, whether the War Department furnishes storage or not. These supplies should be shipped without delay, and we naturally will make every possible attempt to protect them from loss and deterioration by storage in old cantonment buildings at Schofield Barracks, in old magazines in the coast defenses, and in hangars. It is believed sound policy to furnish proper storage without delay in order to protect important supplies from deterioration which might far exceed the cost of storage. * * * It is necessary even now to store supplies in open or hangar storage, and only a few buildings of any kind are available, as they are occupied by troops and current supplies. It is quite a remarkable fact that supplies stored in closed storage on this island (Oahu) keep in condition as good as or better than the same class of supplies stored in the same manner in the United States, while the deterioration of these supplies stored in open or poor storage is very much greater than the same class of supplies stored in the open or improper storage in the United States.

"Another strong reason for this storage is that the supplies must be centrally placed in time of peace to require a minimum of guarding and fire protection, and to be immediately available for proper distribution when the necessity arises.

"In order to take the best care possible of the supplies before the warehouses required are constructed, they would no doubt have to be widely distributed, would be difficult to guard and difficult to handle in time of necessity. In order to follow out the definite principles in the Oahu defense project and give every facility to the proper tactical functioning of all units, the distribution of supplies at the outbreak of hostilities should be simple and easy of execution with a minimum of men and transportation, which would not be the case without proper centralized peace-time storage. An involved system of supply, made necessary by improper storage facilities in time of peace, might seriously hamper the work of the tactical commander at the outbreak of hostilities."

In view of the facts and reasons stated by General Summerall it is desired to emphasize the necessity for the early initiation of the construction asked for in this item, which is as low as it is possible to make it.

Subitem 2.—Magazines for storage of war reserve ammunition, \$64,000. This item is for 18 ammunition sheds required for the storage of ammunition for G. P. F. guns, antiaircraft guns, and railway mortars called for by the project. They will be located at the Hawaiian ordnance depot, as this site more nearly fulfills the conditions required for the storage of this class of material, namely:

It will be centrally located with regard to the coast defenses.

It will be accessible to railroad transportation.
 It will be protected from the direct rays of the sun.
 It will be continually under guard.

The guns for which this ammunition is required are operated by the Coast Artillery personnel of the garrison and are located in time of peace on the coast, but in time of war these guns may operate any place on the island. The commanding general, Hawaiian Department, states that he must have the ammunition for these guns and will temporarily store it in the present coast fortifications, doing the best he can for distribution in time of war. Considering the principles involved and the cost of this ammunition, it is highly desirable to place it in a centralized storage place in time of peace, so that it may be readily distributed in dumps in first-class condition in time of war. Centralized storage is necessary for a minimum of guarding, and it should be placed on a railroad spur and at a place readily accessible for distribution by truck also. The amount of ammunition for which storage is needed is:

	Rounds.
G. P. F. guns-----	108, 000
Railroad mortars-----	6, 240
Antiaircraft guns-----	100, 000

Subitem 3.—Shop for care and preservation of Ordnance war-reserve material at Schofield Barracks, \$18,000.

At present the Ordnance Department has no facilities at Schofield Barracks other than that with Artillery organizations for the alteration and repair of Ordnance matériel, either in storage or in the hands of troops. Such facilities are absolutely necessary. It should be necessary to ship to the Hawaiian ordnance depot only such guns, carriages, etc., as require extensive overhauling. The commanding general, Hawaiian Department, states:

"There is sufficient equipment on hand from salvage and not in use for vocational training to equip such a shop. The shops of the Hawaiian ordnance depot are equipped for extensive overhauling and are taxed to capacity with these repairs and minor repairs of Coast Artillery equipment and matériel, and even if ample transportation funds were available (which they are not), the shops of the Hawaiian ordnance depot are not sufficient to do all the repairing of Ordnance matériel in the department. This is mainly due to the increase in motorized artillery. The construction of the shop at Schofield Barracks asked for in this item will in a short time save the amount which it would cost for transportation of matériel from Schofield Barracks to the Hawaiian ordnance depot."

Subitem 4.—Five sheds for Engineer material, \$85,025.

The sheds are required for the storage of Engineer material, to be used in emergency in the construction of trenches, dugouts, obstacles, etc. It is important that this material should be immediately available in proper condition in centralized storage at the outbreak of hostilities so as to permit immediate and rapid distribution with a minimum of men and transportation.

Subitem 5.—Completion of ordnance storehouse area, \$57,000. This item is for the construction of storage for Artillery repair trucks, tractors, machine-gun trailers, and a reserve battery of howitzers called for by the project. Nine storehouses for the storage of ordnance matériel have been constructed in this area at Schofield Barracks, but they are in an isolated area difficult to guard and with no roads. The operation, care, and issue from these storehouses is difficult and it is necessary to complete the work so as to properly handle the matériel stored there. The completion of this area is essential and will be a decided step toward proper centralized storage for the issue of ordnance supplies at the outbreak of hostilities, particularly ammunition for the field guns and the howitzers.

The following construction will be possible with the funds asked for and will complete this area:

Roads-----	\$40, 000
Provision for personnel-----	2, 000
Fencing and protection around magazines filled with high explosives-----	15, 000
Total -----	57, 000

Subitem 6.—Storage of oil, fuel, gasoline, etc., \$218,865. This item is incorrectly stated. It should read, "Storage of fuel oil, gasoline, etc., \$218,865."

The quantities of gasoline and oil for four months required by the project for all purposes, except the Air Service are as follows:

	Gallons
Gasoline	1, 588, 000
Fuel oil (2,500 barrels)	135, 000
Lubricating oil	125, 000

The following requirements to sustain the civilian population and commercial utilities (all the important ones of which are operated by the use of oil):

Gasoline	gallons ..	800, 000
Fuel oil	barrels ..	400, 000
Diesel oil	gallons ..	50, 000
Lubricating oil	do	125, 000

The storage space now available for gasoline is:

Army	gallons ..	3, 000
Commercial	do	3, 397, 000

Total

do	3, 400, 000
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Fuel oil, commercial	barrels ..	300, 000
Lubricating oil (including Diesel), commercial	gallons ..	2, 000, 000

The project contemplates, of course, that in case of hostilities such utilities and supplies necessary for the prosecution of the plan of defense will be taken over and controlled by the military authorities, and from the figures just quoted it will be seen that there is sufficient commercial storage now available in Oahu to provide for the war needs of both the Army and the civilian population. This storage space is, however, not suitable for military purposes either to properly handle these supplies or protect them from bombardment. The present commercial storage is on the water front and affords an excellent target for enemy warships, and it is a fair and reasonable assumption that facilities so important to the defense as these will be one of the first objects of attack. As previously brought out in the other items, the plan of defense of Oahu contemplates a reserve of men and material at Schofield Barracks, and as the majority of the gasoline and oil required for the use of the Army during a four months' siege is for units stationed at Schofield Barracks, and as there are railway connections to Fort Kamehameha, where the motorized units of the Coast Artillery are stationed, Schofield Barracks is the proper place for the storage of gasoline and oil for the exclusive use of the military forces.

Plans have been made to store the oil in barrels (50 gal.), its commercial container, in open sheds and to store the gasoline in tanks (bulk storage) and to so locate them on the Schofield Barracks reservation that they are protected from fire and observation and permit filling from tank cars and emptying by gravity flow. The number of tanks is 30 (52,500 gallons each) for gasoline and 3 (52,500 gallons each) for fuel oil.

There will be auxiliary storage tanks of 3,000 gallons capacity, one each at Fort Kamehameha, Fort Ruger, Fort Shafter, and Fort De Russy.

This method of storage reduces the estimate contained in the project from \$691,000 to \$218,865.

Subitem 7: Water supply, "Ku Tree" reservoir

\$200, 000

This item is for approximately one-half the amount necessary to complete this reservoir (\$415,000), which, when completed, will complete the water system for the war garrison of Oahu. The importance of this water supply for Schofield Barracks has already been recognized by Congress in the appropriation of \$600,000 contained in the second deficiency bill, fiscal year 1921. The sum contained in the Budget for 1923 is needed to continue the work already begun.

The reservoir is an essential feature of the water supply system, and as considerable time is required for the construction and filling of the reservoir, the work on this particular feature should not be longer delayed.

Subitem 8: Refrigerating plant

\$200, 000

This item is for the initiation of the construction of a refrigerating plant at Schofield Barracks, the total cost of which was originally estimated at \$447,000, but now reduced to \$231,500. The capacity of the plant is sufficient to manufacture ice for the garrison and store those supplies for reserve and current use requiring cold storage for their preservation.

The Oahu defense project provides for the feeding of the civil population of Oahu by a slightly reduced ration from commercial stock on hand during the period of four months that the island must be self-sustained. Investigation shows that there is a constant supply of food available for the population to subsist on in peace for 90 days; a slightly reduced allowance will therefore permit the population being sustained for 120 days from this supply. It will therefore be seen that every effort must be made to provide storage for all the components of the ration for the garrison for the full period of four months, as no storage space, particularly cold storage, will be available without a further reduction of the ration for the civil population, particularly in those articles which require refrigeration for their preservation.

The need of a supply of ice to properly care for the sick and wounded, especially essential in a tropical climate, is an added necessity for making the supply for the garrison in this particular independent of the commercial supply upon which the present peace garrison is now dependent.

In this connection, the commanding general Hawaiian Department states, under date of November 30, 1921:

“(b) The present garrison at Schofield Barracks should have an ice plant without delay. The present method of shipping ice in box cars daily from civilian firms in Honolulu is wasteful and extravagant.

“(c) A 10 days' storage for frozen beef is necessary for the efficient supply of the peace-time garrison at Schofield Barracks. The present method of supply is to ship frozen beef from Honolulu in box cars to Schofield Barracks daily—no refrigerator cars are available—and to issue direct to troops from the box cars. This method is the only one practicable at present, but is wasteful and expensive. Providing Schofield Barracks with sufficient cooling rooms for the storage and issue of beef and mutton will enable beef to be shipped periodically to Schofield Barracks direct from the storage room of the contractor in Honolulu to the cold-storage rooms at Schofield Barracks and from there be issued to troops in an efficient manner.

“(d) Perishable supplies, such as butter, eggs, fruits, beef, and meat products, which are so necessary for any garrison in the Tropics, should be stored in suitable cold storage at Schofield Barracks for the health and contentment of the peace-time garrison. The present method of rental of storage for these articles in Honolulu is expensive, wasteful, and is difficult to supervise from Schofield Barracks.

“6. A plant would be needed to manufacture ice for 15,000 men to store one month's supply of perishable articles (except beef) for 15,000 men, and to store frozen beef for 15,000 men for 10 days in time of peace. In addition to the above, the plant should be capable of manufacturing sufficient ice in war time for a garrison of 30,000 men.

“8. Even considering the necessity for rigid economy, it is believed that the appropriation by Congress of \$200,000 for beginning the Ku Tree Reservoir, and the appropriation of \$200,000 for construction of an ice plant for peace-time needs will more than justify the expenditure in the saving to the Government and the contentment of the men that will ensue from these very necessary installations, as well as securing an adequate water supply and sufficient refrigeration in time of a siege.”

In order to properly prepare the island of Oahu for a self-sustained defense of four months, the authorization of the construction requested in these estimates should be unquestionably made, as the amount is small compared to its importance in connection with the plan of defense.

The importance of this construction for storage is so great that the commanding general has asked that it be given priority over that required for the shelter of personnel. The approval of this request is strongly recommended.

I might say that the main thing I wanted to present was this: There has been a good deal of talk about the necessity for a certain strength of troops and garrisons at these points. I am prepared to answer any questions that the committee may care to ask on that subject. We think we have the garrison now down to a minimum.

Senator LENROO. Do you think that the Washington conference which has just closed has any bearing at all upon that question?

Colonel WELLS. In so far as the Hawaiian Islands are concerned, I think not. In so far as the Philippines are concerned, yes.

Senator LENROOT. That would be true as a matter of right. It has very great bearing on the Philippines, because we are prohibited to do certain things.

Colonel WELLS. As far as the Philippines are concerned we are prohibited from making any increase in coast defenses, and the Navy is prohibited from any increase in its naval bases. However, under the terms of the treaty, we could do a great deal more in the Philippines than we have ever done before. But having held the islands for 22 years, and Congress not having seen fit to do it, I do not know yet what may be done there. We may, perhaps, lean on the treaty for the defense of those islands, and, in consequence, reduce the strength of our garrison over there. That is what is now, in fact, under consideration.

The size of what is known as the "expeditionary force" in the United States has been so small, and there is such a desire on the part of many of the General Staff to make this force more commensurate with our needs by providing each corps area with at least a reinforced brigade that other needs have had to give way. I think we are pinching the Philippine garrison a little below what it ought to be. As a matter of fact it depends on what the administration expects to do over there in the future. I do not know, and I doubt if you gentlemen know. If we expect to have any trouble at any time in that part of the world, I think the Philippines are very desirable and very essential; but if we expect no trouble, why then you can change the mission of the commanding general to be one of maintaining internal order only—without any idea of the defense of the place at all.

Senator LENROOT. Are we prepared to assume that the possibility of trouble involving Hawaii has been very much lessened through the Washington conference?

Colonel WELLS. My personal opinion is, no, sir.

Senator LENROOT. It has not?

Colonel WELLS. I will say that the possibility of trouble has been lessened, but what I mean is that if any defense at all is needed, it should be an adequate defense; the magnitude of that trouble has not been lessened. I think the possibility is less than it was.

Senator LENROOT. That is my question.

Colonel WELLS. I think it is less than it was, but the magnitude of the trouble, in case there is any, has not been lessened.

Senator LENROOT. Of course, we all agree to that.

Colonel WELLS. Therefore we do not think the size of the garrison which we have already fixed as the minimum can be reduced any more.

Senator LENROOT. Evidently that would be true as a question of policy. However, if we knew there was no possibility of trouble in the next 12 months it would affect the situation, would it not?

Colonel WELLS. Within the next year?

Senator LENROOT. Yes.

Colonel WELLS. My view of that, Senator, would be this, that Hawaii is so important for the defense of the United States—not for itself, but for the defense of the United States—that this project should be executed as insurance.

Senator LENROOT. As a permanent policy?

Colonel WELLS. Yes.

Senator LENROOT. I am differentiating between a permanent policy and an immediate difficulty.

Colonel WELLS. I do not anticipate anything immediate at all.

Senator LENROOT. You would consider this the most important item in the bill, would you not, Colonel?

Colonel WELLS. I consider this the most important of our defense items; yes.

Senator LENROOT. That is what I mean.

Colonel WELLS. Yes.

THE DEFENSE PROJECT FOR THE PANAMA CANAL.

The Panama Canal is a national asset of vast military and strategic importance and of great potential commercial value. The strategic and military importance of the canal lies in the fact that:

(a) Its possession insures the prompt concentration of our fleets in either ocean, thus affording our Navy the advantages of interior lines of operations; (b) it is a fleet base of first importance; and (c) its possession makes it possible to maintain trade with South American ports, whence we shall expect at least partially to make good certain deficiencies in war-making materials.

It is believed that the American people value very highly their achievement in the construction and the ownership and control of this great utility. Its loss would be a blow to their pride, and would be a greater blow from a military point of view than the loss of any other of our possessions. With the object of preventing such a loss and with a clear insight into the future, provision for the defense of the Panama Canal was made in the Spooner Act of June 28, 1902, which provided for the construction of the canal. Up to the present time the defensive measures that have been provided are almost entirely confined to the protection of the entrances of the canal from naval attack. The defensive measures adopted are similar to those that apply to many of our important harbors and ports within the continental limits of the United States.

There is, however, a radical difference between the defense of the Panama Canal and harbors within the continental limits of the United States. The latter have behind them the great area of the country, with its resources in men and matériel all connected on the land side by most modern means of communication. Reinforcements and supplies of all kinds can be obtained by land even should command of the sea be lost. On the Canal Zone, however, reinforcements and supplies can be obtained solely by sea. The two entrances are connected by rail as well as by the canal itself, and thus afford each other some mutual support, but otherwise the sea is the only means of communication, and should an enemy gain command of the sea the canal would become isolated and its defense would have to be conducted without further hope of reinforcements or supplies. As a consequence the defense of the Panama Canal is a much larger and more difficult problem than the defense of one of our harbors within the continental limits of the United States. It involves the protection of the canal from damage, destruction, and capture, and makes necessary not only the defense of its entrances from direct naval attack but also the defense of the adjacent coast line against landing operations, the defense of the flanks of the canal, and its being placed in proper condition to resist a siege or prolonged operations. When Congress decided that the canal should be fortified it was intended that it should be held against any and all enemies. A partial or incomplete defense would be the height of folly.

The mere protection of the entrances against naval attack is not sufficient. The protection must be complete and thorough.

Based upon experience gained in the recent war, the project for the defense of the Panama Canal has been revised and brought up to date. This project represents many months of faithful, earnest, and efficient work with a high conception of their responsibilities on the part of the officers who prepared the project. The project is based upon a mission which was determined by the Joint Army and Navy board and approved by the Secretary of War and by the Secretary of the Navy. The work was initiated early in 1919 and the completed

project was submitted to the War Department on September 1, 1920. It provides the means and forces for preventing an enemy from landing and establishing himself on either the Atlantic or the Pacific coast within striking distance of the canal, and to meet, defeat, and hold any enemy beyond effective artillery range of the canal. The principal means and forces required to make this project effective may be stated as follows:

- (a) The garrison.
- (b) Harbor defenses that will provide protected areas to enable our fleet to leave or enter the canal out of range of enemy capital ships and that will protect shipping and any canal accessories at the terminal from damage by an enemy fleet.
- (c) Means of communication—roads, bridges, ferries, telegraph and telephone lines, mechanical and water transportation to enable concentration of forces at threatened points and to permit of economy in the utilization of forces.
- (d) An air force.
- (e) Air defense. Guns for protecting canal accessories from air attack.
- (f) Naval auxiliaries for coast patrol and reconnaissance.
- (g) Local guards.
- (h) Reserve supplies and storage facilities.
- (i) Hospitalization.

In determining the mission of the Panama Canal garrison, the joint Army and Navy board added the following statement:

"It is appreciated by the board that since the Army installations in Panama were planned and installed there has been a marked increase in the range of the naval guns. Their efficiency at long range has also been increased, due to aerial observation. The increased efficiency of offensive naval operations against ports of this character due to these recent developments makes the present installations at Panama inadequate to fully accomplish all the objects stated in the mission. The joint board is of the opinion that the War Department should undertake at the earliest possible date such steps as may be necessary to so increase the effectiveness of the defenses as to fully accomplish the mission assigned. The joint board further appreciates that to do this it will be necessary for the War Department to ask for additional appropriations from Congress for that purpose. The importance of this becomes apparent when it is pointed out that any weakness in the defense plans for the Panama Canal would make a weak link in our whole system of national defense."

What the joint board had in mind was the fact that during the period in which the fortifications were planned, appropriations secured, and construction of the armament and batteries undertaken and carried to completion, marked developments had taken place in the design and offensive powers of naval vessels. The vulnerability of the present fixed armament lies in the fact that a large number of capital ships now afloat, lying outside the protected areas established by the existing armament, can successfully attack by gunfire the installation at the termini of the canal, the locks at Miraflores, San Pedro, Miguel, and Gatun, and will be able to attack our own fleet in detail as it emerges from either entrance of the canal. Without going into detail as to the capital ships that might be employed in operations against the canal, it is sufficient to say that two naval powers other than the United States possess at the present time ships with more than the offensive power required for such a task in view of the fact that they carry 16-inch guns. In other words, the major part of the entire Canal Zone, including the locks and utilities, can be brought under the effective fire of high-power naval guns without the attacking ships being subjected to fire from any of our fortifications. The War Department has been fully alive to the weakness of the fixed defenses at Panama and it has announced, in reports to Congress, the purpose of providing for the installation of a certain number of large-caliber guns. These guns are superior to any now possessed by any power, and when mounted will have an approximate range of 50,000 yards.

The present estimates carry a very modest sum solely for the maintenance of existing armament. They do not provide for the installation of the guns mentioned during the fiscal year 1923.

In pointing out our deficiencies in the fixed armament I do not wish to convey the impression that the correction of these deficiencies will solve the problem of an adequate defense of the canal. The harbor defenses constitute but one element of the defense and have definite missions over the sea and land areas. They must be supplemented by adequate mobile forces of all arms, including aircraft. In order that the mobile forces may be effectively employed

and their numbers kept within reasonable limits, communications and roads are essential. It is also evident that without adequate storage and reserve supplies the troops can not be maintained and the defense must fail. All of these elements are provided for in the project, the order of priority being stated in each case.

In presenting this project it is desired to emphasize the fact that the project has been passed upon by the highest authorities of the War and Navy Departments, and has been approved by the Secretary of War. I desire to emphasize the point that the canal at the present time is far from being in a proper position for defense. As matters now are the canal will stand or fall with the Navy. Once the Navy has lost command of the sea the canal will automatically and quickly fall. A blockade would be sufficient. The importance of this can not be overestimated when it is realized that the military value of the canal lies principally in the fact that it is a necessary naval adjunct which insures our supremacy in the Pacific and makes possible an adequate defense of our interests in the Atlantic.

MISSION OF THE GARRISON.

To defend the Panama Canal and its accessories against: (a) Damage from mines, bombs, or other explosives placed by enemy sympathizers or dropped from enemy aircraft; and (b) attacks by enemy expeditionary force or forces supported or unsupported by an enemy fleet or fleets.

The reduced peace garrison has been fixed as follows:

	Commis- sioned.	Warrant.	Enlisted.
1 department headquarters	31	13	5
1 division headquarters	24	12	51
1 infantry brigade headquarters and headquarters company	6	1	34
3 infantry regiments	165	3	3,936
1 Field Artillery mountain regiment	49	1	1,003
1 Engineer regiment	26	1	710
Air Service:			
1 observation squadron	31		132
1 pursuit squadron	23		132
1 bombardment squadron	40		132
1 group headquarters	4	1	35
1 air park	16		200
2 balloon companies	5		172
1 photo section	1		20
1 branch intelligence office	1		5
Medical Department:			
1 medical regiment	24	1	277
Miscellaneous for hospital and detachment	22		190
Quartermaster Department:			
1 division train	10		313
1 bakery company	1		21
1 bakers' and cooks' school	1		13
Miscellaneous			178
2 motor repair sections	2		36
Special troops, Infantry division:			
1 headquarters	3		8
1 headquarters and military police company	4		109
1 signal company	6		150
1 motor-cycle company	1		36
1 ordnance maintenance company	1		48
Coast Artillery district headquarters	5		5
Coast Artillery Corps	92	2	1,795
1 signal company (service)	3		55
Finance Department			10
Ordnance Department			51
Total	597	35	9,867

In war or when war was imminent the peace garrison will be raised to war strength and increased by additional units of tanks and aircraft sent from the United States and from personnel available locally. The authorized war garrison is about 47,000 officers and men.

FIXED DEFENSES.

In addition to the existing fixed defenses the following armament has been authorized: Certain antiaircraft and G. P. F. guns, and the construction of batteries for the large-caliber guns previously mentioned.

The project is based on the following:

- (a) The canal is of vital military importance only as a naval adjunct.
- (b) While intact the canal provides a base from which the fleet may debouch and operate in either ocean.
- (c) The use of the canal as a base for the fleet requires the control of a sea area at each end of the canal of such size as to permit the fleet maneuvering to enter or to debouch from the canal.
- (d) The battle fleet must be free to operate against enemy naval craft in its proper function of controlling, or fighting to gain control of, vital lines of communication.
- (e) The naval support available to assist in the defense of the canal will be limited to the local force provided for in the existing plans. If, however, the naval situation warrants, this force will be augmented by additional submarines in case of threatened or actual attack.
- (f) The strength of the attacking expeditionary force, or if two forces, then the total strength of both forces is taken as 75,000.
- (g) In a war with a single power lines of communication via at least one ocean will be controlled by the Navy.
- (h) In a war with a two-power coalition the Navy may not be able to control the lines of communication in either ocean after a period of three months from the declaration of war.
- (i) Reserve supplies, reserve ammunition, etc., should be based upon requirements for a self-sustained defense for a period of three months.

SUPPLIES.

A three months' reserve of all classes of supplies for maintenance of the men and animals and material necessary for construction of temporary shelter and defensive works other than fixed defenses, together with hospitalization and repair facilities for the war strength garrison. In addition to these war reserves there is kept on hand at all times two months' supplies for the actual existing regular garrison.

Estimated amount necessary for construction to complete project.

Roads, trails, bridges, and ferries.....	\$13,089,000
Telephone and telegraph lines.....	213,174
Harbor defense	10,722,500
Air defense	1,185,265
Air service	3,103,165
Shelter	25,122,617
Storage	11,806,703
Field fortifications	716,865
Hospital facilities	2,010,000
Total.....	67,909,289

Amount asked for fiscal year 1923.

Roads, trails, bridges, and ferries	None.
Telephone and telegraph lines	None.
Harbor defense	None.
Air defense	\$14,500
Air service	None.
Shelter	None.
Storage	\$1,028,800
Field fortifications	None.
Hospital facilities	None.
Total.....	\$1,093,300

Senator SUTHERLAND. Is there anything you wish to say especially about this item of \$2,996,400 for continuing construction of barracks and quarters, storehouses, etc.?

Colonel WELLS. I want to state that since the Budget went in the item of \$1,567,600 for the construction of one regimental post at

Fort Clayton has been eliminated by the Secretary of War. It has been cut out and should not be considered by the committee. The total amount that should be considered by the committee is \$1,133,300, all of which is for construction of storage except two items, viz, \$64,500 for air defense and \$40,000 for fire control. [Reading:]

The amount necessary to complete the construction called for by this project is estimated at \$66,567,600, provided the amount asked for this year is granted, spread over a period of years. While it would be desirable in the interests of economy and for other reasons to reduce this period to five years, it is realized that our financial situation may demand that the period be extended. This is a matter which can be decided best by the committee. It will be noted that unless a more liberal allocation of funds is made than is provided for in the Budget for 1923, the period for the completion of the project will be indefinite.

Senator SUTHERLAND. Come down to the storage plant.. It was testified that that was most important.

Colonel WELLS. Yes; it is most important.

Senator SUTHERLAND. Have you anything you would like to say about those two items?

Colonel WELLS. Nothing except what appears in my statement and that there is now no permanent storage for reserve supplies, and very poor temporary storage for the current needs. The project for Panama is somewhat larger than the one for Oahu, and it will take a longer time to get it finished. It will be paid-up insurance when we do get it finished, and I think we ought to decide now to finish the project and start on essential features. We have waited a long time. Perhaps Congress has waited a long time, too, to get a definite statement of what these projects are. I do not think it has ever been presented before. We have attempted here to lay before the committee just exactly what the War Department has in mind for the future in those two places. So if you think the projects are reasonable and that they should be followed, you will have paid-up insurance in both places. My personal opinion is that if you execute those two projects you are through with them except for upkeep. You will have not only finished them, but you will have guaranteed peace there, because no nation will risk a serious attack upon them.

With reference to what the House bill has done, I should like to invite attention to the action taken by the House of Representatives on the items for new construction in furtherance of the defense projects.

The total we received for new construction for Panama in the bill is it passed the House was \$40,000. The amount we asked for new construction is \$1,133,300.

Senator SUTHERLAND. You might complete that statement with reference to the Panama Canal.

Senator HARRIS. You asked for how much? They gave you \$40,000, and how much do you want?

Colonel WELLS. We asked for \$64,500 for the air defense item. We have the guns, and this is for installing them. It had been carefully estimated, and \$64,500 is the amount that it will take to do that. They gave us \$40,000.

Senator HARRIS. What are the other items?

Colonel WELLS. For the fire control for the antiaircraft guns we asked \$40,000, and they gave us nothing.

Senator HARRIS. What else?

Colonel WELLS. The next item is item 3, which we want to cut out. It has been cut out of the Budget, and it does not appear in the House bill. The Secretary of War has decided that he will not ask for the \$1,567,600 to build a regimental post.

The next item is storage, \$1,028,800, for which they gave us nothing.

Senator HARRIS. Is Camp Clayton named for Colonel Bertram Clayton?

Colonel WELLS. Yes.

Senator SUTHERLAND. You think that fourth item should be included?

Colonel WELLS. Yes; we think it is very important to get that storage. As I say, they have no storage there now for reserve supplies.

Senator SUTHERLAND. The total you have there in the third item is \$1,133,300, and of those items the House gave you \$40,000?

Colonel WELLS. Yes.

Senator HARRIS. You want now how much?

Colonel WELLS. \$1,133,300.

Senator SUTHERLAND. Is there anything else you would like especially to call attention to?

Colonel WELLS. I will conclude my detailed statement. [Reading:]

ESTIMATE FOR THE PANAMA CANAL DEPARTMENT.

DEFENSE PROJECT FOR THE PANAMA CANAL.

The Budget for 1923 (p. 478) includes the following items for the Panama Canal Department:

Military posts, Panama Canal:

For continuing the construction of barracks, quarters, storehouses, and other buildings necessary for accommodating the mobile Army troops to be stationed in the vicinity of the Panama Canal, including all appurtenances thereto (submitted)-----

\$2,596,400

Objects of expenditure:

Gatun storage plant----- 1,028,800

Fort Clayton, barracks and quarters for one regiment of Infantry----- 1,567,600

Total----- 2,596,400

Since the Budget was submitted the Secretary of War has directed the elimination of the item of \$1,567,600 for barracks and quarters at Fort Clayton, leaving for consideration under this heading only the Gatun storage plant, \$1,028,800.

The approved project for the defense of the Panama Canal calls for war reserve supplies for three months for the authorized war garrison of 47,782 officers and men, and in addition a two months' supply for the actual existing peace garrison.

There are to be two storage plants for general supplies, one the main storage on the Pacific side where the bulk of the garrison will be stationed in time of peace, and one a secondary storage plant to supply troops stationed on the Atlantic side. It is for the construction of a part of this storage plant that the funds asked for the fiscal year 1923 are to be used.

The following consideration and facts concerning storage of supplies for the garrison are considered essential to an understanding of the necessity for the storage construction during the coming fiscal year.

1. *Location of storage depots.*—The principal points considered in the location of storage depots for the defense project are as follows, viz: (a) proper supply to troops; (b) replenishment of supplies to depots; (c) economical

distribution of supplies; (d) economical construction of depots; and (e) concentration of control over supplies.

Storage depots decided upon are as follows, viz:

Engineer depot.—This depot is to contain all reserve engineer supplies which are to be held within the department.

Ordnance depot.—This depot is to contain all reserve ordnance supplies except ammunition, which are to be held within the department.

Main storage plant.—This storage plant is to contain all reserve supplies for Motor Transportation; Signal property; Chemical Warfare supplies, except grenades, bombs, gas, etc.; Medical supplies and approximately two-thirds of all Quartermaster Corps supplies, to be held within the department. The main storage plant includes also a bakery of sufficient size from which all bread for troops can be supplied. A cold-storage plant of sufficient size for the storage of 30 days' supply of all perishable subsistence supplies, except fresh meat. Fresh meats are to be gotten as needed from the Panama Canal. A school for cooks and bakers. A repair shop for the repair of all motor vehicles within the department. Shops for blacksmiths, painters, plumbers, carpenters, and electricians, and sufficient barracks for enlisted personnel and quarters for officers and noncommissioned officers for the operation of the plant.

Secondary storage plant.—This plant is to be sufficient in size for the storage of approximately one-third of all reserve Quartermaster Corps supplies and all reserve oils and gasoline. It will also include sufficient shops for blacksmiths, painters, plumbers, carpenters, and electricians.

Ammunition storage plant.—Storage for all reserve ammunition, bombs, grenades, etc., here. In preparing the ammunition-storage project and in deciding upon the most desirable location, three important principles were considered, first, localizing any explosions and protection by the construction of small storehouses located on the ground, which affords the most natural protection, and by isolation of these buildings; second, central location and accessibility; and third, economy of construction consistent with efficient supply.

This ammunition plant will be operated as a subdepot to the Panama Arsenal, and consequently the numbers of personnel, barracks, and administration buildings will be reduced to a minimum. If this scheme is followed, the only buildings required at the ammunition storage plant will be those for storage space, and a temporary barracks and administration building to be used only during the receipt of the ammunition and in time of war by the personnel necessary for the handling of the ammunition.

SUPPLY TO TROOPS.

During peace time, supply will be made direct to troops from the depots. Sufficient supplies of all kinds, except quartermaster supplies, can be kept in the hands of troops, so that monthly issues will suffice for replenishment. Sufficient quartermaster supplies are to be held at the main depot for supply to all troops on the Pacific coast and sufficient quartermaster supplies are to be held at the secondary depot for supply to all troops on the Atlantic coast.

The longest haul for the delivery of supplies is approximately 2 miles, except for Coast Artillery troops.

Supplies for Coast Artillery troops can be delivered by rail or road, while supplies for other troops must be delivered by road.

Supply to troops at Fort Davis will be made by motor or animal-drawn transportation, while supply to Air Service troops and Coast Artillery troops can be made by rail, water, or road.

During hostilities the main, secondary, and ammunition depots will be used as the main depots of supplies.

Distribution to troops will be made by truck to the end of the roads which lead into the defense sectors. From the end of the roads, distribution will be made to troops by 60 centimeter railway or pack train. The longest truck haul under this plan is approximately 35 miles.

Supply to certain troops on the Atlantic side can be made direct by boat to troops.

REPLENISHMENT OF SUPPLIES.

During peace time and so long during war as the lines of communication to the United States remain intact, replenishment of supplies to the depots will be made by boat to docks at Cristobal and Balboa, and from docks to

depots by rail. However, under the plan, supplies after reaching dock can be delivered to the depots by rail or road.

If the lines of communication to the United States are cut, then reserve supplies will be on hand to last three months after current supplies are exhausted.

ECONOMICAL DISTRIBUTION OF SUPPLIES.

The storage depots have been located centrally with respect to the location of troops. This brings the longest haul down to a minimum. It is proposed to deliver supplies to troops from the central depots by trucks or animal-drawn transportation.

The depot for the storage of ammunition is isolated from other storage in order to minimize the risk of loss by explosions and to conceal the depot as much as possible.

Distribution of ammunition from this depot will be made by rail so that the shortest possible haul will be made by truck.

All classes of supplies may be transported from either end of the Canal Zone to the other by rail, road, or water.

ECONOMICAL CONSTRUCTION OF DEPOTS.

The general type of construction recommended for depots is concrete. No wooden construction is recommended, due to rapid deterioration of wood. Where possible open-shed storage has been recommended, but this type of storage is not suitable except for supplies which are in daily use. Due to the extreme humidity, supplies of practically all character are susceptible to rapid deterioration, unless they are stored in dry storehouses and constantly cared for. Where possible two-story buildings have been recommended with fire walls every 200 feet in length; this with a view of concentrated storage and minimum cost of construction.

All storehouses, shops, quarters, etc., are condensed in space with a view to economy of municipal work.

The reserve supplies to be carried are limited to essential nonperishable articles.

CONCENTRATION OF CONTROL OVER SUPPLIES.

It is proposed to place the main storage plant and the secondary plant each under the control of one officer. The Ordnance and Engineer depots are to be controlled by an Ordnance and an Engineer officer, respectively.

No storage space, except small rooms in barracks, has been recommended for the separate garrisons.

This should prevent accumulations of dead storage, stocks will be turned over and not become old, repair and salvage work will be accomplished at a central plant, and personnel for handling supplies will be held to a minimum.

AIR SERVICE SUPPLIES.

Storage for Air Service supplies has been recommended built at the fields where Air Service troops are to be garrisoned. These supplies are used by air personnel only, and the plan allows them to be cared for by personnel familiar with them. This method allows machines to be taken directly out of reserve storage, set up in the shops, and put directly in the hands of troops.

The total amount necessary to completely construct the secondary storage plant is estimated at \$1,694,990. The War Department, however, decided not to include the entire sum in the Budget for 1923. The amount asked for—\$1,028,800—is for storage and barracks for 135 men, constituting depot personnel. Officers' quarters, office space, and other facilities are eliminated.

There is not sufficient storage now constructed in the Panama Canal Department to care for current needs. There is no storage for reserve supplies. All storage now available is located at Corozal. It consists of small Engineer and Ordnance depots and two temporary buildings recently moved there from Camp Gaillard. All supplies landed at the Atlantic side are now shipped to storage at Corozal and then reshipped as needed back to troops on the Atlantic side. This results in unnecessary expenditures for transportation, but must continue until storage has been constructed which will eliminate the back haul. The secondary storage plant is but a small part of the storage now urgently needed. The appropriation asked for is the minimum that should be made to start the project.

In this connection the commanding general Panama Canal states:

"The need for storage is very urgent. The present quartermaster storage at Corozal consists of one wooden storehouse, 100 by 300 feet, used for subsistence; one two-story wooden barrack, 43 by 278 feet (second floor of which is too light construction for heavy loads), used for clothing, both of which buildings were originally part of Camp Gaillard but were moved to Corozal early in 1921 so as to permit the evacuation of Pier 18; and seven wooden hay sheds at Corozal, used for general supplies, each 60 by 94 feet, temporarily connected by canvas corridors. The storehouse and barrack were constructed prior to 1915, but because of their move and reconstruction, at a cost of approximately \$82,000, will last about three years longer without material repair. The hay sheds were built in 1919 and have required no repairs up to the present time, but will need extensive repairs in another year. It is very desirable to return these hay sheds to their original purpose as soon as suitable storage can be provided for the supplies now stored there.

"*Medical supplies.*—These are stored at present in an old, dilapidated, leaky wooden building in Cristobal rented from the Panama Canal at a monthly rental of \$12. This building was in such a state of repair that the canal did not wish to expend any more funds on it. This building is not worth repairing. * * *

"*Signal supplies.*—These are in two wooden buildings at Corozal of 6,400 square feet floor space. These buildings, while suitable for about three years longer, are small.

"*Engineer supplies.*—These, like the signal supplies, are in buildings at Corozal only large enough for peace requirements of the present reduced garrison.

"*Ordnance supplies.*—The Ordnance Department has the best storage facilities of any of the supply branches. Such storehouses as are built are of concrete. They are insufficient for the storage required under the defense project, but the needs of this branch are not so important as to require action this year.

"*Air Service.*—The immediate needs of the Air Service are being met by a special allotment, and no other request for storage construction this year is contemplated.

"The supply branches needing immediate relief are the Quartermaster and Medical Departments.

"While the defense project calls for a main storage plant and a secondary plant, it is desirable now, from an economical standpoint, to complete the secondary plant first. Unless this is done it will be necessary to ship all supplies to the Pacific side of the isthmus and then reship to the Atlantic side, such supplies as may be required for troops on that side, thus involving a return haul with the attendant additional expense. This return haul is now reduced but not eliminated by the present method of segregating supplies on the pier at Cristobal and shipping direct to posts. The use of the pier for this purpose is granted on revocable permission, which may be withdrawn at any time. * * *

"It is not sufficient to say that storehouses can be built on the outbreak of war. This department is as isolated as if it were on an island. All supplies and troops must come by water. In case of war shipping would be heavily taxed in transporting troops and supplies as long as water routes remain open and it should not be required to transport construction material for which the need can be foreseen.

"This department is expected to maintain a defense for a specified period with a specific number of troops. The supplies required for this defense can be estimated now, and all the nonperishable supplies, together with a portion of the less easily damaged supplies, can be stored before the outbreak of war. Climatic conditions here will not permit the storage in the open of any supplies without danger of excessive deterioration. The defense project estimates the amount of storage space required to protect the supplies necessary to enable troops to carry out their mission. If this storage can be constructed during peace and wholly or partially filled, the demands upon the outbreak of war will be materially reduced, with a corresponding increase in the prospects of success in the defense of the canal."

THE PHILIPPINE ISLANDS.

For more than 20 years the United States has been responsible for the safety of the Philippine Islands, but never during this time has our Government taken measures adequate to defend these islands. In the opinion of the War Plans

Division, such a defense would involve maintaining on the island of Luzon a force—active and reserve—of approximately 100,000 men generously provided with aircraft and supplemented by a considerable force of submarines. The War Plans Division has, from time to time, considered what additional means might be taken to strengthen the existing defense of the Philippines. Among the measures considered were (a) a large increase in the Air Service garrison, particularly in bombing and pursuit squadrons; (b) an increase in the number of submarines assigned to the Philippines; and (c) the organization of a native army for employment in the event of external aggression.

The extent to which the above measures might have been carried out would probably have fallen far short of providing what might reasonably be called an adequate defense. But in addition to the expense involved in providing such a defense there has now been created, in article 19 of the naval treaty, an absolute prohibition against any future increase in the Philippines of existing naval facilities for the repair and maintenance of naval forces or in the existing coast defenses.

The mission of the garrison may, therefore, resolve itself into one of maintaining order.

The authorized peace garrison has been about 18,000 officers and men, which number includes about 8,000 Philippine Scouts. A plan is under consideration to reduce the peace garrison to about 9,500, organized as follows:

	Commis- sioned.	Warrant officers.	Enlisted.
American combat troops:			
Department headquarters.....	40	13	5
1 Infantry brigade headquarters and headquarters company.....	6	1	34
2 Infantry regiments.....	110	2	2,624
1 signal company (service).....	3		55
1 observation squadron.....	31		133
1 photo section.....	1		20
Air park personnel.....	3		72
1 branch intelligence office.....	1		5
Coast Artillery.....	5		100
Total.....	200	16	3,047
Philippine Scouts—			
1 headquarters, special troops.....	3		6
1 headquarters and military police company.....	4		109
1 Infantry brigade headquarters and headquarters company.....	6	1	34
2 Infantry regiments.....	110	2	2,624
1 Field Artillery regiment.....	49	1	1,008
1 Engineer regiment.....	26	1	710
1 signal company.....	6	0	150
1 Cavalry regiment.....	38	1	641
1 machine gun troop, Cavalry.....	4		72
Total.....	246	6	5,351
American staff troops:			
Quartermaster Corps.....	5	10	101
Finance Department.....	3		32
Ordnance Department.....	1		99
Medical Department.....	6		160
Chaplains.....	10		
Total.....	25	10	392
Philippine Scouts—			
1 medical regiment.....	24	1	377
Attached medical.....	30		163
1 division train.....	10		313
1 motor-cycle company.....	1		36
Miscellaneous quartermaster corps.....	2		100
1 ordnance maintenance company.....	1		48
Total.....	68	1	937
Summary—			
American.....	225	26	3,439
Philippine Scouts.....	1,314	7	6,288
Total garrison.....	539	33	9,727

¹Some of these officers will be Americans.

The above figures include the troops now in China. When the garrison is relieved from duty there it is contemplated sending it to the Philippines. The troops in China are part of the white brigade of Infantry which forms part of the Philippine Division, and should be returned when no longer required in China.

There is no item in the Budget for 1923 for new construction in the defenses of the Philippine Islands, except \$36,000 for fire control. The other sums included in the Budget are small and are intended for continued operation and upkeep of the facilities it is planned to retain.

As previously explained, the plan which is under consideration to reduce the Philippine garrison, as I have just indicated, is based on the desire to make the small total of 157,000 men Congress has authorized furnish a sufficient mobile (or expeditionary) force in the United States. It is felt that inasmuch as some one or another of the phases of the Regular Army's mission must suffer, it is best to choose the one concerning which the treaty extends a measure of protection. This question, however, has not been definitely decided. There may possibly be no material reduction in the Philippine garrison. In this event plans for the mobile forces in the United States will have to be curtailed.

I should now like to invite attention to the action that has been taken by the House of Representatives on the items for new construction in furtherance of the defense projects for Panama and Oahu included in the Budget.

On February 23, 1922, General Pershing appeared in person before the subcommittee on Appropriations, House of Representatives, of which Mr. Anthony is chairman, and in executive session outlined to that subcommittee the War Department projects for the defense of the Panama Canal and the Island of Oahu, in order to make clear to that subcommittee the necessity for the several items carried in the Budget pertaining to these two localities. The general explained in detail all that the War Department plans to do in the future in Panama and Oahu, showed what small parts of the projects were included in the Budget for the fiscal year 1923, and how those parts fit into future plans.

An analysis of the bill making appropriations for the War Department for the fiscal year ending June 30, 1923 (H. R. 10871), introduced March 13, 1922, shows that of the total amount asked for by the War Department (\$2,748,290) for the furtherance of the defense projects of the Panama Canal and the Island of Oahu, but \$525,000 has been provided. It is strongly recommended that the amounts submitted by the War Department for the several items enumerated below be appropriated.

The following is an analysis of the items referred to:

Panama Canal department.

Committee print.	Item.	Submitted by War Department.	Appropriated in H. R. 10871.
Line 10, page 63.....	Seacoast batteries (item 3, p. 473, Budget)..... This item is for continuation of the antiaircraft project, and covers funds for mounting guns and cutting trails to same.	\$64,500	\$40,000
Not included.....	Fire control (item 3, p. 474, Budget)..... This item is to provide a fire-control system for the antiaircraft defenses on the Pacific side.	40,000	(¹)
Do.....	Military posts (item 3, p. 478, Budget)..... Barracks and quarters for one regiment of Infantry at Fort Clayton (withdrawn by Secretary of War after submission of Budget).	1,567,600	
	Secondary storage plant..... This item is for partial construction of the warehouse of the secondary storage plant.	1,028,800	(¹)
	Total.....	1,133,300	40,000

¹ No funds provided for this item in H. R. 10871.

Hawaiian Department, Oahu.

Committee print.	Object of expenditure.	Submitted by War Department.	Appropriated in H. R. 10671.
Line 12, page 62.....	Construction of seacoast batteries (item 2, p. 470, Budget). This item is to complete the heavy battery indicated on map.	\$215, 000	\$215, 000
Line 15, page 62.....	Electrical installations (item 3, p. 470, Budget)..... This item is for the power plant for the heavy battery.	120, 000	120, 000
Not included.....	Land defenses (item 4, p. 470, Budget)..... This item is for the continuation of the construction of military roads.	210, 500	(1)
Line 9, page 40.....	Military posts (item 2, p. 478, Budget)..... This item is for 24 standard magazines at \$9,000 each, \$216,000; magazines for storage of war reserve ammunition, \$64,000; shop for care and preservation of war reserve material at Schofield Barracks, \$18,000; 5 sheds for engineer material, \$85,625; completion of ordnance storehouse area, \$57,000; storage for fuel oil, gasoline, etc., \$218,665; water supply, Ku Tree Reservoir, \$200,000; and refrigeration plant, \$200,000.	1, 050, 490	* 150, 000
	Total.....	1, 604, 990	455, 000
	Panama Canal Department.....	1, 133, 300	40, 000
	Hawaiian Department.....	1, 604, 990	465, 000
	Total.....	2, 748, 290	525, 000

¹ No funds provided for this item in H. R. 10671.

² No funds provided for these items in H. R. 10671 other than \$150,000 for the refrigeration plant.

The completion of these two projects is of vital importance in the scheme of national defense. They are not matters that should wait the coming of an emergency, but must be carried to completion in time of peace in order that when an emergency does come these garrisons will be prepared to carry out their missions. The entire projects look large, but they do not aggregate as much as the cost of two modern battleships, and it should be remembered that it will be many years before all the work can be completed. It is believed that the completion of these projects affords the surest method of preserving peace.

The construction contemplated during the coming year for which funds are asked is very limited and appears to meet the desire both the War Department and Congress have for economy.

The following is a statement of amounts asked for by the War Department for upkeep and maintenance of existing fortifications in the insular possessions and the Panama Canal and shows the amount provided by the House of Representatives:

Insular possessions.

Committee print.	Object of expenditure.	Submitted by War Department.	Appropriated in H. R. 10671.
Lines 23 and 24, page 62.	Fortifications in insular possessions (for repair and preservation) (p. 469, Budget): Hawaiian Islands.....	\$15, 000	\$15, 000
	Philippine Islands.....	85, 000	60, 000
Lines 3 and 4, page 63...	Supplies for seacoast defense (maintenance and repair of searchlights, etc.) (p. 469, Budget): Hawaiian Islands.....	25, 534	20, 000
	Philippine Islands.....	50, 000	40, 000
Lines 9 and 10, page 62..	Plans for fortifications (preparation of) (p. 469, Budget): Hawaiian Islands.....	3, 000	3, 000
	Philippine Islands.....	4, 000	2, 000
Line 17, page 62.....	Construction of Engineer wharf, Fort Mills, Philippine Islands (p. 470, Budget).	15, 000	15, 000
Line 24, page 48.....	Maintenance of fire control installation (p. 471, Budget)...	25, 000	25, 000
Line 7, page 70.....	Purchase, manufacture, and test, seacoast cannon (p. 471, Budget).	150, 000	150, 000
Line 11, page 70.....	Purchase, manufacture, and test of ammunition for seacoast cannon (p. 471, Budget).	1 225, 000	67, 700
Line 15, page 70.....	Alteration and maintenance of seacoast artillery (p. 471, Budget).	90, 000	60, 000

¹ Can be reduced to \$67,700.

Insular possessions—Continued.

Committee print.	Object of expenditure.	Submitted by War Department.	Appropriated in H. R. 10871.
Lines 11 and 12, page 74.	For construction of fire control station (p. 472, Budget):		
	Hawaiian Islands.....	\$30,000	\$30,000
	Philippine Islands.....	36,000	12,000
Line 14, page 79.....	Maintenance of submarine mine material (p. 472, Budget):	10,000	10,000
	PANAMA CANAL.		
Line 16, page 63.....	Preservation and repair of fortifications (p. 473, Budget).....	50,000	40,000
Line 20, page 63.....	Supplies and fortifications (maintenance and repair of searchlights, etc.) (p. 473, Budget).....	45,500	30,000
Line 21, page 63.....	Maintenance of clearings and trails (p. 473, Budget).....	34,000	20,000
Line 11, page 63.....	Sea walls and embankments (p. 474, Budget).....	4,000	4,000
Line 8, page 63.....	Plans for fortifications (preparation of) (p. 474, Budget).....	3,000	3,000
Line 17, page 79.....	Submarine mines (maintenance and repair of material) (p. 475, Budget).....	5,000	5,000
Line 3, page 49.....	Maintenance of fire-control installations (p. 475, Budget).....	10,000	10,000
Line 20, page 70.....	Purchase, manufacture, and test of ammunition for seacoast and land defense cannon (p. 475, Budget).....	* 225,000	85,000
Line 24, page 70.....	Alteration, maintenance, and installation of seacoast artillery (p. 476, Budget).....	65,000	55,000

* Can be reduced to \$132,000.

I should now like to speak of the so-called expeditionary force—its objects, location, and strength.

Among the five major missions of the Regular Army is that of providing an adequate organized, balanced, and effective domestic force, which shall be available for emergencies within the continental limits of the United States, or elsewhere, and which will serve as a model for the organization, discipline, and training of the National Guard and the Organized Reserves.

It is the mobile force, charged with the above mission, organized into combat units and located at the various posts and camps throughout the country, that our people have in mind when they speak of the Regular Army. It constitutes the one—in fact, only—immediately available mobile military force at the disposal of the Government with which to meet emergencies, either within or without the continental limits of the country. It is this force that is sometimes referred to as the expeditionary force, a title not accurately descriptive, as the duties falling to these troops are much more comprehensive than that designation would indicate. These duties may be summarized, briefly, as follows:

(a) To assist in and form part of the complete and immediate mobilization for the national defense in the event of a national emergency declared by Congress (act June 4, 1920).

(b) When available and necessary to assist in the development and training of the Organized Reserves, National Guard, and the Reserve Officers' Training Corps and the civilian military training camps.

(c) To act as the repository of the military traditions, customs, and ideals of the regular component of the United States Army, and to serve as a model for the organization, discipline, and training for the National Guard and the Organized Reserves.

(d) To train and develop Regular officers and noncommissioned officers in time of peace for the duties they will be called upon to perform in time of war.

(e) To provide an adequate, organized, balanced, and effective mobile force which shall be ready and available for emergencies within the continental limits of the United States or elsewhere.

(f) To provide for Mexican border patrol.

(g) To provide for the study and development of all agencies of warfare in order that measures for the defense of the country may be improved by advances made in science and in the arts.

Manifestly these missions are not assignable properly to the National Guard or the Organized Reserves. They are legitimate duties for professional soldiers. There is nothing new in them. They are simply the normal duties for the performance of which Regular troops have been maintained since the creation of the Government. While the national defense act of June 4, 1920, has placed new and vastly broader responsibilities upon the War Department

in the matter of organizing, training, and developing the citizen soldier components of the war Army, these new responsibilities have in no way diminished the need for a permanent force for certain purposes, which have always existed and which must continue to exist. Nor does the strength now recommended by the War Department for the Regular Army effect any increase in the so-called expeditionary force over the prewar strength of that force. In fact, the strength will be practically the same as that prior to the enactment of the national defense act of June 3, 1916, and substantially less than the strength provided in that act.

The necessity for maintaining a mobile force for the performance of the duties above outlined, and the duties themselves, are so thoroughly understood that it appears needless to elaborate thereon.

In a sense this force provides the school of application where our officers gain command experience, where standards of discipline and training are determined upon, customs, ideals, and traditions preserved, new methods and agencies of warfare studied, tested, and developed, and type organizations of standard equipment and efficiency established and maintained to serve as models for the organization and development of the National Guard and Organized Reserve components of the Army. It furnishes replacements for the overseas garrisons. Without such force for the purposes above outlined there would in time be an inevitable loss of efficiency for the accomplishment of even those missions of the Army which do not fall directly to the expeditionary force. In a word, it is only through the maintenance of this mobile force in a reasonable strength that the Regular Army derives its capacity to fulfill all of its missions. Without such a force no opportunity would be furnished regular officers to qualify themselves to a degree that makes them acceptable to the civilian components of the Army as instructors.

It may, also, be of interest to mention in connection with the emergency employment of this force that since 1902 there have been 51 emergencies other than war for which Regular Army troops have been used. (I have a table here listing these emergencies:)

Emergencies other than war for which Regular Army troops have been used in the last 20 years.

Year.	Emergency and location.	Year.	Emergency and location.
1902.....	Earthquake; Martinique.	1918.....	I. W. W. activities; Arizona.
1903.....	Riot of strikers; Morenci, Ariz.	1918.....	Street-railway and cotton-mill strikes; Columbus, Ga.
1903.....	Flood; Pacolet Valley, S. C.	1918.....	Guarding and preserving order at lead and zinc mines; Flat River, Mo.
1903.....	Floods; Kansas and Missouri.	1918.....	Miners' strike; Jerome, Ariz.
1903.....	Cyclone; Gainesville, Ga.	1918.....	Race riot; Winston-Salem, N. C.
1904.....	Fire; Baltimore, Md.	1919.....	Disorder by deserters resisting arrest; Blairsville, Ga.
1904.....	Floods; Kansas and Missouri.	1919.....	Shipyard strikes; Seattle and Tacoma, Wash.
1906.....	Earthquake and fire; San Francisco, Calif.	1919.....	Miners' strike; Butte, Mont.
1906.....	Threatened labor trouble; Boise, Idaho.	1919.....	I. W. W. activities; Jerome, Ariz.
1906.....	Anticipated disturbances during opening of Indian reservations; Shoshoni, Wyo.	1919.....	Labor strike; Gerard, Ga.
1906.....	Ute Indian disturbances; Gillette, Wyo.	1919.....	Race riots; Charleston, S. C., Washington, D. C., Omaha, Nebr., and Elaine, Ark.
1907.....	Miners' strike; Treadwell, Alaska.	1919.....	Flood relief work; Corpus Christi, Tex.
1908.....	Domestic violence; Goldfield, Nev.	1919.....	Steel strike; Gary, Ind.
1908.....	Miners' strike; Treadwell, Alaska.	1919.....	Strike duty; Knoxville, Tenn.
1908.....	Flood; Hattiesburg, Miss.	1919.....	Coal strike; Charleston, Beckley, and Clothier, W. Va., Wyoming, Utah, Brownsville, Pa., Bayue, Wash., Pittsburg, Kans.
1908.....	Cyclone; flood in Alabama, Tennessee, Arkansas, Texas, North Carolina, and Georgia.	1919.....	Coal miners' strike; Gallup, N. Mex.
1910.....	Forest fires in Montana, Idaho, Washington, California.	1919.....	Raton, N. Mex., and McAlister, Okla.
1911.....	Eruption; Mount Taal, P. I.	1919.....	Strike duty; Bogalusa, La.
1912.....	Floods; Mississippi.	1920.....	Negro uprising; Dumas, Ark.
1913.....	Forest fires in Mount Tamalpais, Calif., Carmel Valley, Calif., and Adirondacks.	1920.....	During trial of persons charged with murder of members of American Legion; Montessano, Wash.
1913.....	Floods; Texas (Rosenberg, Orchard, Richmond, Sealy, San Felipe, Ross, Mound, etc.).	1920.....	Strike duty; Ute, Mont.
1913.....	Floods; Ohio and Mississippi; Ohio and Mississippi Valleys.	1920.....	Miners' strike; West Virginia.
1913.....	Tornado; Omaha.	1920.....	Attempting lynching of negro; Lexington, Ky.
1913.....	Cyclone; Lower Peach Tree, Ala.	1921.....	Flood; Pueblo, Colo.
1914.....	Miners' strike; Trinidad and other Colorado mining districts.	1921.....	Disorders; West Virginia.
1914.....	Miners' strike; Prairie Creek, Ark.		
1916.....	Raids; Columbus, N. Mex.; Glenn Springs, Tex.; San Ygnacio, Tex.; and Fort Hancock, Tex.		

Some of these emergencies were relatively unimportant. Others were of considerable importance. Whatever the magnitude of the need, due to the existence and training of this regular force, troops were instantly available. Neither would the lack of available troops have eliminated the emergency. Nor is there anything in the experience of the past or in the conditions of today which in any way justifies the assumption that similar needs will not arise in the future.

The emergencies above alluded to do not include the Cuban Intervention in 1906, the dispatch of an expedition to Vera Cruz in 1914, and the expedition under General Pershing into Mexico in 1916.

It may be added that from June, 1915, to June, 1917, there were received in the War Department approximately 400 requests from different States and individuals for Federal troops.

LOCATION.

In the matter of distributing this mobile force, if strategic consideration alone were to be fulfilled it would perhaps be best to locate the force in a few large posts suitably situated on the Atlantic and Pacific coasts and the Mexican border. There are, however, other important considerations which must be met. As already pointed out one of the primary objects of this force is to maintain certain well-trained and in every respect standard organizations as models or object lessons for the training of the citizen soldier components of the Army. To serve effectively as such models or object lessons these organizations must from time to time be brought into close association with the National Guard and organized reserves. This can only be accomplished by having them participate jointly in summer-training camps, maneuvers, etc. To undertake the distribution of the regular forces for these purposes from a very few large posts or camps would entail considerable travel and cost in the matter of transportation. Moreover emergency use within the country suggests distribution rather than undue concentration.

Actually it is proposed to locate these troops at the permanent posts in different parts of the country, also utilizing a few of the existing camps. Sufficient accommodations exist for the force recommended. These posts and camps already possess target ranges and the various requirements to make effective the training.

If the force recommended by the War Department is granted, it will be the policy to locate at least one unit of each of the major combatant arms in each of the nine corps areas. The aim will be to have at least a reinforced brigade in each corps area. Of course, the Eighth Corps Area, including as it does Camp Travis, the station of the Second Division, and practically all of the Mexican border, will have considerably more than that number of troops. The Ninth Corps Area will likewise have more—probably a division.

These details necessarily vary from time to time to meet changing conditions and demands for troops, but the basis of the policy to be followed will be the utilization of existing posts and accommodations and the location of mobile combat units in each of the corps areas.

STRENGTH.

With an enlisted strength of 150,000 plus Scouts there would remain after deducting the troops allocated to the missions of training the citizen soldier components, general overhead for the Army, garrisons for coast defenses, and garrisons for overseas possessions, about 82,000 available as a mobile force in the United States.

When it is considered that this will be the total available mobile regular force within the United States, it is difficult to conceive how the very comprehensive mission that properly falls to it can even be approximately performed with a lesser number.

Appended is a table showing how it is proposed to organize this force and a comparison in the matter of major units (regiments) of the several arms with the number of such units prior to the Spanish-American War and also with the number provided in the reorganization act of 1901.

Number of major units, or strengths, of the principal combatant arms.

Arm and unit.	At out- break of Spanish- American War.	Under reorganiza- tion act of 1901.	Under national defense act of 1916.	Present or- ganization based on 130,000 men. ¹
Infantry regiments.....	25	30	65	2a
Cavalry regiments.....	10	15	25	14
Artillery.....	7			
Artillery Corps, enlisted strength.....		17,742		
Field Artillery regiments.....			21	14
Coast Artillery, enlisted strength.....			30,000	15,768

¹ Exclusive of Philippine Scouts. From the numbers given must be deducted the troops on foreign service to determine the numbers to be located in continental United States.

NOTE.—The Coast and Field Artillery became separate arms in 1906.

There is one more matter I should like to mention. It has been brought to my attention by the Chief of Engineers.

It is of great concern to the General Staff as well as other agencies of the War Department, and I mention it now because it might not be considered in the hearings of other officers. It concerns the Engineer reproduction plant.

The Engineer reproduction plant at Washington Barracks is the base lithographic plant for the War Department (see W. D. Circular No. 130, May 18, 1921). In this capacity it is engaged upon:

(a) Reproduction of the tactical, fire control, and training maps required for military operations in time of peace and in time of war.

(b) The preparation and reproduction of relief maps and models for the use of the General Staff, the Army War College, the service schools, and for general instruction and training purposes.

(c) The reproduction of special maps of many different classes including those required for war plans and aerial navigation.

(d) Lithographic and photographic work of a general nature for all the War Department branches and services, such as statistical data for the General Staff; landscape targets and ballistic tables for the Ordnance Department; recruiting posters, lantern slides, charts, diagrams, etc.

A large part of the above work relates to the operations of the Military Intelligence Division of the General Staff, and is highly confidential. A very large number of lithographic plates are kept on file ready for instant use in the quantity reproduction of secret maps and other data for the use of troops in case of emergency. Much of the general lithographic work is directly connected with the training of troops, including the National Guard and Organized Reserves. By carrying out this work in its own plant instead of having it done by commercial concerns the War Department has made a considerable saving and has been able to provide essential maps, charts, and diagrams which otherwise could not have been furnished with the limited funds available.

The Engineer reproduction plant is essential to the War Department, not only for reproduction of maps for the use of the Regular Army, the National Guard, and the Organized Reserves, but as a means for the peace-time training of troops in preparation for war. The number of lithographic operatives in civil life is small, and the number of apprentices in training is exceedingly limited. Actual experience has shown that at the outbreak of war there are not enough lithographers in the United States to meet the demands of the various branches of the Government, to say nothing of commercial needs. Furthermore, lithographers in civil life are not familiar with military requirements, and can not be used to advantage until they have been trained to work under military conditions. It is necessary, therefore, to develop new operatives in the military service who shall be familiar with its requirements, and in so far as may be possible, to train those in civil life in order that they may be used to advantage in the Military Establishment in time of emergency. The Engineer reproduction plant is now being used with marked success for the training of enlisted men of the Regular Army, and constitutes the only agency available for training Organized Reserves.

The cost of operating the Engineer reproduction plant is met by two Engineer appropriations, "Engineer operations in the field" and "Military surveys and maps," reimbursement being made by other branches of the service for work

done at their request which can be properly charged to some specific appropriation under their control. Between \$60,000 and \$70,000 of Engineer Department funds are required annually to maintain the plant in operation, and take care of work of a general nature, which can not be charged to an appropriation pertaining to some other branch or service.

The Army bill now pending in Congress carries only \$85,000 under the item, "Engineer operations in the field," and \$25,000 for "Military surveys and maps." Unless these amounts are increased, it will be impracticable for the Chief of Engineers to allot more than about \$36,000 to the Engineer reproduction plant during the next fiscal year. This will result in cutting the personnel at the plant to a skeleton force, which will be unable to make the necessary progress on work connected with important defense projects, or to carry out the program for instruction and training. It has taken years to build up the highly skilled personnel now on duty at the plant; in any reduction of force, the only loser is the United States. The employees will have no difficulty in securing positions elsewhere.

It should be pointed out that this plant does not come into competition with the Government Printing Office, which is not equipped for lithographic work, but that its maintenance is essential as a measure of preparedness for war, for the same reason as the maintenance of Air Service, the Field Artillery, or any other branch of the Army is necessary. It is especially recommended that the appropriation for "Engineer operations in the field" for 1923 be increased by the Senate to at least \$117,500, the amount carried in the Budget, in order that the Engineer map reproduction plant can continue to function on an efficient basis.

Then I would like to state to the committee that the war plans division, while interested, of course, in all other divisions of the staff, is particularly close to military intelligence. Concerning the needs of military intelligence Colonel Heintzelman will appear before you later. I want to take this opportunity to assist him by telling the members of the committee that the work he is doing is most important to us, and I believe to all other divisions of the General Staff, and of the War Department in general. It is one of the divisions of the General Staff that usually has difficulty in making its wants appreciated. It provides us with information that we must have or else there is very little necessity for a war plans division. If we do not get the information upon which we can build war plans, we can not proceed with our work. We simply must have it.

Senator HARRIS. Every other country has it.

Colonel WELLS. Every other country has it, and we must have it. Before the war we limped along with very little in that line. During the war we all learned to appreciate the necessity for an agency of that kind; and while I have not been on duty personally, with this division, it has cooperated closely with our own work, and I know it is doing good work and essential work. If it is handicapped, we will have to do that work ourselves, and I do not think any economy will result. We would require to have the work done and it would not be as efficiently done as it is now.

Senator SUTHERLAND. The House cut that item?

Colonel WELLS. My understanding is that the amount asked for was \$225,000 and they have cut it to \$100,000 I think it ought to be restored. I am prepared to say that \$225,000 is not arbitrary. I know Colonel Heintzelman is economizing; that he has reduced the number of military attachés; that he has reduced the clerical force he has had in the past year and has reduced the number of officers.

Senator HARRIS. On what page is military intelligence?

Senator SUTHERLAND. Page 6 of the bill. It seems to me this is a bad place to cut.

Senator HARRIS. You asked for \$225,000, and you have that this year, and they gave you \$100,000 for next year?

Colonel WELLS. Yes.

Senator SUTHERLAND. Is there anything else, Colonel Wells?

Colonel WELLS. I should like to invite particular attention to one thing, because I was present when the speeches were being made in the House about the size of the Army. The statement was made that we are the only country in the world that has not reduced below what we had before the war. As a matter of fact, keeping our Army at 157,000 is a decided decrease below what was authorized before the war.

Senator SUTHERLAND. Relatively or actually?

Colonel WELLS. In the national defense act of 1916 we had authority for approximately 220,000 men. I have had it figured several times. One officer would get 219,000 and another one 221,000, depending on items as to which there was some little uncertainty in the bill, with reference to the strength of the medical department; but the national defense act of 1916 authorized approximately 220,000 men. Some people say that was a war measure. It was not. And the proof of that lies in the fact that Congress provided for the increase of what we had in five annual increments. That act gave us authority for 65 regiments of infantry. With 157,000 men we can have only 38. The total strength of the Army authorized by the act of 1916 was about 220,000 men and we have now 157,000 counting the scouts, and that is a decided reduction. The Cavalry regiments authorized by that bill were 25, and we can have only 14. And so with the other arms of the service. I invite your attention particularly to that, as you hear the statement made that we have not reduced to our prewar strength. You see that statement in the papers and you hear it made on the floor.

Senator SUTHERLAND. That has been referred to several times.

(Thereupon, at 5.05 o'clock p. m., the committee adjourned until Tuesday, April 18, 1922, at 10.30 o'clock a. m.)

WAR DEPARTMENT APPROPRIATION BILL, 1923.

TUESDAY, APRIL 18, 1922.

UNITED STATES SENATE,
APPROPRIATIONS COMMITTEE,
Washington, D. C.

The committee met pursuant to adjournment.

STATEMENT OF BRIG. GEN. W. D. CONNOR, ASSISTANT CHIEF OF STAFF—Continued.

Senator SPENCER. General, will you continue?

General CONNOR. I have one item.

Senator SPENCER. On what page is it?

General CONNOR. On page 30 of the print which you have, line 6.

REGULAR SUPPLIES OF THE ARMY.

General CONNOR. This is the item of regular supplies of the Quartermaster's appropriation, which provides for the purchase of a great many different items which are commonly known under the head of supplies. I will not go into them. The amount appropriated by the House is \$10,932,000. We urge very much that that amount be put back to the amount recommended by the Secretary in the revised budget, a copy of which came in this morning, \$14,000,000. That is the figure submitted in a revision of the different items of the Quartermaster General's appropriation, not increasing the total submitted in the budget, but subdividing it differently from his first estimate.

Senator LENROOT. To what extent is that dependent on the size of the Army, or is it dependent on the size of the Army?

General CONNOR. That is for 150,000 men. This will increase that amount by about \$3,000,000, and if the limitations on the rest of the page are written in I recommend strongly that whatever increase there be in the total amount be also put into the items on line 17 for fuel and for forage, i. e., by increasing the authorized amounts for these two purposes \$1,500,000 each.

Senator LENROOT. That is whatever increase is made over the House provision be put in fuel and forage?

General CONNOR. Be divided between fuel and forage; yes. Those are the particular items it is difficult to handle. The \$4,000,000 for forage in line 17 will only permit of 41,000 animals in the Army with that limitation, and the present number, according to the table of organization for an army of 150,000 men is 56,000 animals, and with the forage we get at the remount depots and grazing wherever

we can, if the amount is set up as recommended by the Quartermaster General we can maintain the 56,000 animals.

Senator LENROOT. You have now 56,000?

General CONNOR. In round numbers; yes. We strongly urge that those two items be considered in that increase of \$30,000,000, and that it be at least divided evenly between those two, or whatever increase is given should be so divided.

That is the only item I wish to discuss.

Senator LENROOT. Who is next?

STATEMENT OF BRIG. GEN. J. H. McRAE, ASSISTANT CHIEF OF STAFF, PERSONNEL DIVISION.

Senator LENROOT. General, will you go ahead with whatever you wish to discuss?

OFFICERS.

General McRAE. I have been designated to appear before your committee on the following subjects: (1) Demands for commissioned and enlisted personnel of the Regular service; (2) effect of reduction and demotion of personnel on morale; (3) use of retired officers on active duty.

On page 15 of the House appropriation bill, beginning line 4, is a provision "that the sum herein appropriated for the pay of officers shall not be used for the pay of more than 11,000 commissioned officers." We think that the 11,000 officers is not enough.

There is no such thing as a mathematical determination of exactly how many Regular Army officers are needed. The question is, in reality, "How much national defense, or national insurance, does the country want?"

- Military strength is not alone a question of members. A mob is not an army. There must be both men and material, and there must be training and organization. Without in the least detracting from the efficiency and value of National Guard and reserve officers, it may be said that the Regular Army officers are the continuing professional personnel who must be relied upon to develop our military strength in time of peace and to leaven and direct our mobilized man power in a crisis. Hence, the question of the number and quality of officers is merely a question of how much preparation is wanted.

The present national defense act authorizes a total of 16,677 officers. A strength of 150,000.

Senator LENROOT. Just state that again.

General McRAE. The present national defense act authorizes a total of 16,677 officers. That is taking into consideration the reduction in the Medical Department, chaplains, etc., whose numbers depended on a percentage of the total of enlisted strength. When the Army was reduced to 150,000, of course, it reduced the number of those officers, and this number 16,677 is the number that is now authorized by the national defense act.

Senator LENROOT. Of course, you recognize that that was authorized upon the theory that we would have an army of 280,000?

General McRAE. Yes, sir. After careful study it is estimated that about 15,600 permanent officers should be maintained for an enlisted

strength of 150,000 plus the Philippine Scouts. Practically the same number would be required for an Army of 115,000. In peace this officer body would be improving and preparing itself for the test of war and would be planning, erecting, and training our man power. In war it would leaven the mass of some 150,000 officers that such a mobilization would require. Realizing the necessity for stringent economy and fully appreciative that at best it will require a few years to fully develop the plans for the national defense, the War Department has scaled down its immediate requirements of officers to the minimum to which it can go without sacrificing the fundamentals of a reasonable degree of preparedness. This number is 13,000 officers. In a general way it will be about equally divided between that with, or pertaining strictly to, Regular troops and duties independent of the Regular troops. Furthermore, this minimum number is not proposed as a permanent proposition; it is merely proposed during the transitory stage, when the strictest economy must be exercised and during which our needs in the way of national defense will crystallize.

I may say that the recommendations of the War Department are in line with the Senate bill 3113 that has been introduced.

Of the 6,500 officers—that is, in round numbers, one-half of the 13,000—required with troops, about two-thirds will be required for the mobile army in the United States; about one-third for the United States coast defenses and overseas garrisons.

Of the 6,500 officers not with troops, about one-third will be required for general administration and overhead duties that ramify throughout the Military Establishment. The other two-thirds will be allotted to the development and instruction of our reserve forces and to the very necessary function of keeping the military school system in effective operation.

Every one of these functions is vital to the national defense, and none of them can be effectively performed with a less personnel than the minimum proposed by the War Department. Hence any reduction below the total of 13,000 will be at the expense of national defense. By July 1, 1923, the National Guard and Organized Reserve projects and the educational requirements will have reached a point which will require the services of at least another thousand officers—14,000 in all.

It can not be too strongly insisted that this is the absolute minimum unless we are to scrap our present excellent national defense plan. At the present moment we have an actual shortage of 206 in the number of officers required for duty as instructors with National Guard units already organized. The shortage for that purpose with National Guard units for the next fiscal year would be 471, but at the present time there is a shortage with the National Guard of 206—the number that they want now that we haven't got to give them—a shortage of 446 in the number of officers necessary for duty with units of the Organized Reserves which are in process of organization and in great need of these officers. There is no prospect of obtaining any considerable number of officers for these duties until the various service schools close this summer. By next fall we should, of course, replace the officers thus obtained by those whose basic education is not completed. With a reduced officer body and a small Army it is

absolutely necessary that the school system be kept in efficient operation. Training which can not be had in practice with troops, especially in large bodies, must be compensated for by theoretical instruction. Not only are there shortages with the reserve forces, but there are now material shortages with units of the mobile army in the United States, in the coast defenses, and in the insular possessions. This shortage is, on paper, at least 20 per cent, based upon the present peace-time Tables of Organization. The actual shortage present for duty with units is greater due to the necessarily faulty distribution in grades, absence for various causes, and to the detaching of Regular officers for a variety of miscellaneous duties. As a temporary measure of economy it might be practicable to get along with 20 per cent less than the strength fixed by the tables actually present for duty, but a greater shortage will be destructive of efficiency if continued for any length of time.

I shall refer to the distribution of grades that follows in the House bill after the question of numbers.

Almost as important as the number of officers is the question of their distribution in grades and branches. This distribution affects both training and morale. The present distribution of officers to grades is top-heavy. Both by law and custom it has been necessary to keep the grades filled from the top down so far as officers were available to fill them. Our 4,000 vacancies are, therefore, in the lower grades. This condition is unsatisfactory to all concerned. The new distribution is a matter for careful consideration. It can not be suitably arrived at by arbitrary adherence to certain percentages that now happen to be fixed in the law for a much larger force than is now contemplated. The distribution to grades must be such as to meet organizational requirements and to provide for the reasonable flow of promotion essential to efficiency.

Taking into consideration the character of duties to be performed it is manifest that the smaller our officer body the higher must be the percentages in the upper grades. Incidentally the higher these percentages the fewer officers of long experience and training need be eliminated in adjusting to a new distribution. The War Department proposes to hold the strength of the Medical Department and chaplains at what it believes to be the minimum necessary, without further fluctuations with the enlisted strength.

I might say the present law, and what is contained in the House bill, provides with regard to the Medical Corps 6½ for every 1,000 men, and medical administrative corps one for every 2,000 men, and Dental Corps and the chaplains are dependent upon the strength of the Army; that is, they are a certain percentage. The War Department thinks now, with the Army reduced in strength, that these numbers should be fixed the same as for the other officers and should not fluctuate with the enlisted strength.

This for the reason that the overhead from a medical standpoint is practically the same for a Military Establishment which includes a permanent personnel varying anywhere between 150,000 and 115,000. Like other officers of the Regular Army, medical officers and chaplains are now called upon for many duties pertaining to the training of the citizen soldiery, which duties would increase in scope and importance with any reduction in the Regular Army component. It further pro-

poses to distribute officers in grades above lieutenant on the basis of 14,000, leaving 1,000 vacancies among the lieutenants to be filled in future.

That is, the percentage in each grade is not figured on the 13,000 which is being asked for in the next fiscal year, but on 14,000.

On page 16 of the House bill, commencing at line 8:

Provided further, That officers found surplus may be recommissioned in the next lower grade.

And so forth.

After the number and distribution of officers is fixed the important matter to be considered is the method of passing from the present to the new distribution. There are three general methods of reducing the number in any grade above the lowest—elimination, absorption, and demotion. The former should be resorted to only so far as there are relatively ineffective officers in a grade or officers who desire to leave the active list in accomplishing a reduction. Absorption causes stagnation of promotion and will seriously affect morale if applied elsewhere than where promotion would otherwise be manifestly too rapid. Demotion adds to stagnation in promotion the disastrous effects of loss of rank and pay and relinquishing an office satisfactorily filled; it should not be resorted to at all. These factors are all carefully considered in the War Department's plan for readjustment. In the Medical Department and chaplains the immediate reduction is limited to the probable number of ineffectives and officers desiring retirement or discharge. For the colonels and lieutenant colonels of the promotion list the total reduction is such that it is believed it will be taken care of completely by the ineffectives and by the voluntary retirements. For the majors and captains elimination is proposed only to the extent of probable ineffectives and voluntary applications; the balance of the reduction in these grades is to be by absorption, thereby serving three purposes: First, avoiding the elimination or demotion of competent officers; second, holding for service a gradually diminishing group of some 500 officers that will be needed during the time lieutenants are being procured and trained; and, third, slowing up promotion where it has been unduly rapid. This plan is a well-balanced plan and will do no violence to the personnel of the Army. A period of five months is contemplated to bring about the readjustment.

Senator LENROOT. Now, General, let me understand that. You say a period of five months will bring about your proposed readjustment so the officers will be properly built from second lieutenant up?

General McRAE. Yes, sir; that is what is provided.

Senator LENROOT. Thirteen thousand?

General McRAE. That is bringing it to 12,000, then bringing in during the next fiscal year 1,000 new officers, lieutenants, brings it up to 13,000 for the next fiscal year.

Senator LENROOT. You have no second lieutenants now, practically?

General McRAE. No; we have practically no second lieutenants now.

Senator LENROOT. I do not understand how that brings about the requisite number of second lieutenants in five months.

General McRAE. It does not bring about the requisite number.

Senator WADSWORTH. I think the general must have misunderstood the latter portion of the Senator's question. It can not be done in five months.

General McRAE. No; we do not have all grades filled.

Senator LENROOT. That was my question.

General McRAE. But it brings about the elimination of the surplus number.

Senator LENROOT. In the upper grades.

General McRAE. In the upper grades.

Senator LENROOT. Brings it down to 12,000?

General McRAE. Brings it down to 12,000.

Senator LENROOT. But will still have captains performing the duties of first lieutenants and first lieutenants performing the duties of second lieutenants?

General McRAE. Yes, sir.

Senator LENROOT. How long, under your plan, would it be before you would have the officers properly distributed in their respective grades?

General McRAE. It was contemplated that during the next fiscal year we would bring in about 1,000 lieutenants. That is about as many as can be gotten in and assimilated in a year, and the next fiscal year, beginning 1924, we would bring in another 1,000. That would complete the 14,000 and have them all distributed properly in the grades. It would take two years to do that.

Senator HARRIS. General, what do you think of doubling the number of graduates at West Point and delaying the appointment of these officers until you can get more graduates?

General McRAE. Of course, that is the best source we have for lieutenants, and if we could get the majority of the graduates from there it would be very desirable.

Senator HARRIS. Would it be worth while delaying getting the lieutenants until you can get graduates?

General McRAE. I do not think we ought to delay beyond two years. We need new blood in order to get the officer personnel well balanced and they ought to come in annually, so many each year, and I do not think it should be delayed longer than that.

Senator WADSWORTH. General, do you happen to recollect what the graduating class of West Point is to be this year?

General McRAE. I do not know the exact numbers. I am informed that the minimum is 102. It may be up as high as 130.

Senator WADSWORTH. It is perfectly evident that you can not recruit your second lieutenant grade from West Point?

General McRAE. Yes, sir.

Senator WADSWORTH. Then doubling the institution would not have effect in increased graduates until four years?

General McRAE. No.

Senator WADSWORTH. And even then probably would not produce over 300?

General McRAE. No.

Senator WADSWORTH. Or 400 a year?

General McRAE. No; it would not be practical to get them all from there.

Senator HARRIS. What about graduating the class a year ahead of time they would ordinarily graduate?

General McRAE. Well, I rather think that they should take the complete course. To get the full benefits of the academy, they ought to take the full course.

Senator WADSWORTH. Such a measure would require legislation?

General McRAE. Yes, sir.

Senator WADSWORTH. Because the appropriation bill of 1918 specifically contained an item that the curriculum should be four years thereafter?

General McRAE. Yes, sir. An important consideration in any readjustment is that the way must be opened to resume at once and carry on a gradual acquirement of new blood. We need second lieutenants, but disgruntled, demoted first lieutenants will not meet requirements. About 1,000 per year is assumed as the maximum that could be procured and assimilated in a year, and the War Department plan provides vacancies for about this number. When the full number of lieutenants has been procured the annual procurement thereafter would be just sufficient to offset losses, probably about 3 per cent of the total strength. But it can not be assumed that newly appointed lieutenants at once become an asset. Until they have had the basic course at the school of their arm and had a year or two with troops they are more of a liability than an asset. For this reason no time should be lost in making some provision that will start the procurement of these much-needed young officers.

RETIRED OFFICERS.

In this connection I call attention to the Senate bill 2371, which the War Department has made a favorable report upon. The War Department has recommended the repeal of the present provisions of law, which prohibit the detail of active officers for duty at schools and colleges and for recruiting service when competent retired officers can be secured. In the near future the Reserve Officers' Training Corps will become the source of practically all of the large number of reserve officers we will need for the Organized Reserves. It is felt that our most active and enterprising young officers should be used on this duty in an instructional capacity, and a number of up-to-date older officers will be needed as heads in the larger institutions. It is essential that the young men of the colleges and schools be favorably impressed, and that they be instructed in the very latest military methods. Retired officers are generally unfit, because they soon lose touch with the latest military methods; they are frequently in poor health; do not make the impression on young men which would be made by younger men; they are only available for limited duty; they go back on inactive status when they do not like their duties or station; they are, while on active duty, just as expensive to the Government as an officer without their limitations. It is believed that better results could be gotten by not limiting the War Department in the choice of officers for one of the most important of its activities. At the present time the retired list contains the names of 1,632 retired officers, of whom 177 are performing active duty.

Senator WADSWORTH. Can you tell us, General, how many of the 177 on active duty are serving as professors in military science and tactics in R. O. T. C. work?

General McRAE. The big majority of them are on that duty. The only other duty, recruiting, has a very few. On civil educational institutions—that is, the R. O. T. C.—there are 133 of the Regular Army and 16 retired Philippine Scouts out of the 177—which includes Philippine Scouts.

Senator WADSWORTH. We have about 650 officers altogether on that R. O. T. C. work, have we not?

General McRAE. Yes, sir; I have that in a table here.

Senator WADSWORTH. I think that has been put in.

General McRAE. We have 642 on R. O. T. C. Our table of organization calls for 700. These are active officers. The 133 retired officers and 16 retired Philippine Scouts are in addition to the 642.

ENLISTED MEN.

The next division of my subject is enlisted men. There are some provisions in the House bill in regard to enlisted men that I desire to discuss, on page 18, lines 16 to 24, it is provided that—

The Secretary of War is directed, under such reasonable regulations as he may prescribe, to grant applications for discharge of enlisted men serving in the continental United States without regard to the provisions of existing law respecting discharges until the number in the Army has been reduced to 115,000 enlisted men, not including the Philippine Scouts. The provisions of this paragraph shall take effect immediately upon the approval of this act.

General Harbord and General Lassiter have covered fully the necessity for 150,000 enlisted men in the Regular Army, exclusive of Philippine Scouts, so I will not take up your time with further details as to the distribution of the enlisted personnel and necessity for the number now authorized.

The enlisted strength of the Regular Army was, on February 28, 1922, 133,639, exclusive of Philippine Scouts. Lack of funds for transportation of recruits from centers of population, where they can be enlisted, to stations of the Army is the reason for being below authorized enlisted strength of 150,000.

Of course, the recruiting that is going on now is a very modified form, just near the posts, and even with that kind of recruiting they could get a great many more than we are getting, but we have not the funds to send them to the stations where they are needed—transportation funds.

I would like to invite attention to the fact that the reductions in the enlisted strength of the Army already made have had a decided tendency to lower morale, which has been accentuated by the demotion of noncommissioned officers that is necessarily incident to reduction in enlisted strength. Further reduction would increase this feeling of unrest and uncertainty. If, nevertheless, you should find it necessary to make some reduction in the enlisted strength of the Army, I would recommend most strongly that the method of accomplishing this reduction be left to the Secretary of War instead of directing discharge of enlisted men. The Secretary of War would accomplish the reduction by slowing up or stopping recruiting and thus avoid the unnecessary expense involved in discharging men prior to expiration of their term of service, as is directed on page 18, lines 16-24, and then immediately recruiting men to replace those discharged upon expiration of term of service.

after the reduction in strength had been accomplished. This would also avoid the disruption of organizations and the unrest caused in the Army by wholesale discharges prior to expiration of term of service.

I might say that according to our estimates, if recruiting continues as now going on, by June 30, considering the number who go out and the number who are enlisted, our strength would be about 126,000. If recruiting would stop now—no further recruiting until June 30—our strength would be down to 110,000.

Senator WADSWORTH. The wastage is pretty rapid in any event?

General McRAE. Yes; about 7,000 a month. On page 22, lines 16-19, it is provided that—

The Army shall be reduced by the Secretary of War so that the sum herein appropriated shall defray the entire cost of the pay of the officers and enlisted men of the line and staff during the fiscal year ending June 30, 1923.

If, therefore, the entire provision on page 18, lines 16-24, as to discharging enlisted men until the Army is reduced to 115,000 were omitted, it would still be the duty of the Secretary of War to reduce the Army to the strength appropriated for by Congress, and he would make the reduction in the way that would least injure the efficiency and morale of the Army, and at the same time effect a saving in the expenditures incidental to discharging enlisted men and transporting them to their homes.

It is therefore recommended that the following words on page 18, lines 16-24, be eliminated from H. R. 10871:

The Secretary of War is directed under such reasonable regulations as he may prescribe to grant applications for discharge of enlisted men serving in the continental United States without regard to the provisions of existing law respecting discharges until the number in the Army has been reduced to 115,000 enlisted men, not including the Philippine Scouts. The provisions of this paragraph shall take effect immediately upon the approval of this act.

Of course this change would be unnecessary if Congress considers favorably the recommendation of the War Department that no reduction be made in the authorized enlisted strength of the Army.

Senator WADSWORTH. General, may I go back a moment? Do I understand you to say that if you stop recruiting now and permit wastage to proceed in the normal fashion, the Army would be down to 126,000 by June 30?

General McRAE. No; down to 110,000 if we stopped recruiting.

Senator WADSWORTH. One hundred and ten thousand?

General McRAE. I will give you the exact figures which I have here. If recruiting stopped on April 1—if it stopped right now, this was figured on April 1—on June 30, 1922, we would be down to 110,019.

Senator WADSWORTH. If recruiting was continued as at the present time?

General McRAE. If recruiting was continued as at the present time we would be, on June 30, 1920, down to 116,356.

Senator WADSWORTH. If recruiting continued?

General McRAE. Yes, sir.

Senator WADSWORTH. I thought I understood you to say 126,000?

General McRAE. Well, I made a mistake. Including Philippine Scouts it would be 122,823, but to continue recruiting on the present

scale it is estimated that on June 30 we would have 116,356 for the Regular Army.

Senator WADSWORTH. Is there any plan on foot to change the scale of recruiting between now and June 30?

General McRAE. No, sir; we can not change that on account of lack of transportation to get the recruits to the posts. There is no intention of changing it. That has been the situation for some time. We have no funds to get the recruits from the centers of population where they are enlisted to the places where they are needed. Of course, they have practically stopped all recruiting in cities. We have no recruiting stations at all. In some of the cities near posts we have places where applicants report, and they send them to a post near by to be enlisted, but the regular recruiting has been stopped.

Senator WADSWORTH. Then in any event the Army is going down to 115,000 by the first of the fiscal year.

General McRAE. Yes, sir.

Senator HARRIS. The bill reads that the Army is to be reduced to 115,000. Would it not be better for the Army if they left the number out and simply provide the pay for 115,000, so you could recruit above that number at times? For instance, if you have to stop recruiting when you have exactly 115,000, then you would have to discharge a number of men before the end of the year. Would it not be better to allow you to run above the 115,000 and have an average of that number?

General McRAE. Of course, what the War Department wants is authority to have 150,000.

Senator HARRIS. I am just taking this as the number put in the bill. The plan is what I was discussing.

General McRAE. To appropriate a certain amount?

Senator HARRIS. To appropriate an amount that would pay for a year for a certain number of soldiers and not limit you to that number, so that if you went above it a little you could go below it and maintain the average.

General McRAE. So that the average during the year would be not above the number?

Senator HARRIS. Yes. It seems to me it would be a convenience to you in recruiting.

General McRAE. I think that would be better, rather than to say it should not at any one time be above 115,000 or 150,000, but the average through the year.

Senator WADSWORTH. That is the effect of the provision on page 22. If that were left in the bill and the provision on page 18 were taken out, as it stands you would have to average over the next fiscal year a strength of 115,000?

General McRAE. Yes, sir.

Senator WADSWORTH. You would be above it on occasions, but you would have to be below it on occasions in order to balance?

General McRAE. Yes, sir.

Senator HARRIS. If you strike out the provision on page 18 it would not be necessary.

General McRAE. Yes; if you strike out the provision directing the Secretary of War under such reasonable regulations as he may prescribe to grant applications for discharge of enlisted men serving in the continental United States, without regard to the provisions of existing law, etc., "until the number in the Army has been reduced

to 115,000"—if that is stricken out, then "the Army shall be reduced by the Secretary of War so that the sum herein appropriated shall defray the entire cost of the pay of the officers and enlisted men of the line and staff during the fiscal year ending June 30, 1923," would seem to accomplish the idea, sir.

Senator WADSWORTH. It does.

General McRAE. Of course, this change would be unnecessary if Congress considers favorably the recommendation of the War Department that no reduction is made in the authorized enlisted strength of the Army.

Senator WADSWORTH. Generally speaking, the authorized enlisted strength or maximum enlisted strength can not be maintained, can it? It is a fact, is it not, that while Congress may state that the Army shall consist of 150,000 and no more, with such a limitation placed upon you you never can really have that number?

General McRAE. No, sir; we are always short something like about 10 per cent. We never are up to the full authorized strength.

Senator WADSWORTH. Is it as high a shortage as 10 per cent?

General McRAE. I think that is about the average. That is just an estimate, but there is always some shortage.

Senator WADSWORTH. I knew there was always some shortage and that it is worth considering, too.

General McRAE. Yes.

Senator WADSWORTH. So often we say we have an Army of 150,000 men, but when you go to look for it, it is not there.

General McRAE. That always has been the case. I have never had it figured out exactly what the percentage is, but I know it is a fact we never have the full authorized strength. Some provisions on page 17 in regard to—

Senator SUTHERLAND. This provision on page 22 would be ample to restrict the size of the Army without that other provision, would it not?

General McRAE. Without the direction to immediately discharge.

Senator SUTHERLAND. And this is the usual method of restricting it, by fixing the appropriation for pay.

General McRAE. Well, when the Army was reduced down from 280,000 to 150,000 they did reduce down by discharging. I do not remember whether the act of Congress prescribed the way or not, but that was the way it was done. They authorized the discharge of all men who applied for their discharge in the month of July, all who applied during July to be discharged, and there were more applications than we contemplated.

Senator SUTHERLAND. That was because there was quite a severe cut made?

General McRAE. Yes; it was a very large cut.

Senator SUTHERLAND. And the wastage would not accomplish the result.

General McRAE. No.

Senator SUTHERLAND. But if Congress in fixing the appropriation for that year had provided it should not be exceeded it would have been necessary to make discharges or otherwise reduce it to that figure?

General McRAE. The natural losses would have brought them down in time, but this is comparatively a small reduction compared to that, even if it came down to 115,000.

Senator WADSWORTH. There was a provision placed in the Army appropriation for this current year authorizing the Secretary of War to discharge, but it did not say to what figure he should bring the Army down, as this House bill does.

General McRAE. This provides for bringing it right down to 115,000, and then the next day you would have to commence to recruit to fill vacancies, and you would have the incidental expense of discharging those men.

Senator SUTHERLAND. And recruiting new men?

General McRAE. And recruiting new men.

Senator SUTHERLAND. A double expense?

General McRAE. A double expense.

Senator WADSWORTH. My recollection is the Army discharged 84,000 men this year.

General McRAE. When those men were discharged at that time to reduce it down to 150,000 one of the inducements was that they were to get their enlistment payment of \$90, all those who had enlisted prior to June 30, 1920, when the law went into effect abolishing this bonus; they were to get \$90, authorized for a three-year enlistment, whether they had had one year or two years, and that was an inducement to them, and it caused a good many of them to take their discharge.

Senator WADSWORTH. And it cost the Government that \$90 and \$55 or \$60 for travel allowance?

General McRAE. For travel allowance and whatever we told them as to the chances of coming back—we told them probably those who went out would not be able to come back, because there would not be any vacancies for them, but they said they would take the chance with \$90 and the travel pay, which looked pretty large to them, and they thought there would be some vacancies when they wanted to come in after they had spent that, so there were a good many went out who did not intend to remain out.

Senator WADSWORTH. I imagine quite a number have come back.

General McRAE. Quite a number have come back, and quite a number were trying to get back as soon as they were discharged.

Senator WADSWORTH. And recruiting started immediately? And the net result of the transaction in those cases was to give the men \$140?

ARMY MINE PLANTER SERVICE.

General McRAE. Yes, sir. The Army Mine Planter Service was created by Chapter IX of the act of July 9, 1918, which authorized for each mine planter five warrant officers. There are at the present time 13 mine planters, employing 65 warrant officers, and there are 14 surplus warrant officers employed on quartermaster vessels, a total of 79 warrant officers. These warrant officers are masters, mates, and engineers of five grades.

Senator WADSWORTH. General Coe testified to the committee that we now have 10 old mine planters and 9 new mine planters, a total of 19; that of the 19 nine have been laid up, and there are 10 boats now in commission carrying 50 warrant officers.

General McRAE. Yes, sir.

Senator WADSWORTH. You just stated you have 65.

General McRAE. Well, we have a total of 79 warrant officers. We have not discharged any of them. As these mine planters were laid up or went out of commission, the warrant officers have not been discharged. We had that number originally. They were authorized for the number of mine planters that were in commission. There are 79 warrant officers, and my figures there saying there are 13 mine planters are probably wrong for the present time. His figures would be more up to date as to the number he has now actually in commission. They are laying those off, and he may have laid off three of them since I got my figures.

Senator WADSWORTH. Yes.

General McRAE. But the number remains the same, the number of warrant officers. Some of them, those who became surplus, have been put on duty on junior mine planters or harbor boats, quartermaster boats, in their capacities as masters, mates, engineers, etc.

Senator WADSWORTH. General Coe states there are to-day 28 assigned elsewhere than on mine planters. This would make a total under his statement of 78 warrant officers in the Army mine-planter service, 50 on mine-planter boats, and 28 elsewhere.

General McRAE. Well, my figure is 79. There must have been one casualty since my data was obtained.

Senator WADSWORTH. I think it is comparatively immaterial.

General McRAE. His figures were a little later than mine. This was the condition on March 16. Now, it has changed some since that, according to General Coe's statement. Probably one of them has been discharged, retired, or he might have died since that time, but it was 79 then. It is 78 now, but the principal remains the same.

On page 17, lines 24-25, and page 18, lines 1-2 of House bill 10871, it is provided—

That the sum herein appropriated for pay of warrant officers shall not be used for the pay of more than 40 warrant officers of the Army mine-planter service.

This will necessitate the discharge, before July 1, 1922, of 38 warrant officers. These men have had every reason to believe that they would hold office as long as their services were satisfactory, with the privilege of retirement. Their summary discharge would be a serious blow to the morale of the warrant officers and noncommissioned officers of the Army. Surplus warrant officers can be employed profitably on quartermaster vessels until the number is reduced by retirement, discharge, and death.

It is recommended that the reduction in the number of warrant officers, Army mine-planter service, be accomplished in the same manner as the reduction in the number of warrant officers. This would be accomplished by changing the proviso on page 17, lines 24-25, and page 18, lines 1-2, to read as follows:

Provided, That no vacancies in the grade of warrant officer, Army mine-planter service, shall be filled until the number in such grade is reduced to 40, and thereafter the number shall not be increased above 40.

Senator SUTHERLAND. General, how long would you say it would be before that number would be reached normally?

General McRAE. I could not say offhand. It depends on their ages and the length of service. I have not figured on that.

Senator SUTHERLAND. Do you think 40 is enough?

General McRAE. That is not enough for the mine planters they have in commission. The Chief of Coast Artillery, of course, could give you better information as to that.

Senator WADSWORTH. He states that there are 50 to-day on the mine planters; he has 10 mine planters in commission, and they carry 50 warrant officers.

General McRAE. I suppose he would cover his actual needs. My point was not so much as to the number actually needed, but as a protest against arbitrarily discharging them, as they had come in with the understanding that it was a lifetime position, as long as they performed their duties properly, and that they had the right of retirement. It approximates the position of a commissioned officer and it did not seem to me as keeping good faith with them to arbitrarily discharge them now.

Senator HARRIS. You would assign them to other duties?

General McRAE. They can be assigned to other duties for which, if they are not assigned, you would have to employ civilian masters, engineers, etc. They can be used to advantage.

The grade of warrant officer was created by section 4b of the act approved June 4, 1920, amending the national defense act. This act provides that—

In addition to those authorized for the Army mine planter service there shall be not more than one thousand one hundred and twenty warrant officers, including band leaders, who shall hereafter be warrant officers.

On page 18, lines 2 to 5, of H. R. 10871, it is provided—

That no vacancies in the grade of warrant officer shall be filled until the number in such grade is reduced to six hundred, and thereafter the number shall not be increased above six hundred.

This number, 600, is apparently intended to be in addition to warrant officers of the Army mine planter service, but it would be better to make this more clear by the change indicated below.

There are at present 118 warrant officers in the service who are qualified for duty as band leaders. There are 102 authorized bands in the service, and 9 warrant officer band leaders are required for duty at the Army Music School. The gradual reduction of the number of warrant officers from 1,120 to 600 will certainly result in leaving some bands with no band leaders, and no warrant officers qualified for duty as band leaders.

It is therefore recommended that the appointment of band leader for authorized bands be authorized during the process of reduction in the total number of warrant officers. This would be accomplished by changing lines 2 to 5, page 18, of H. R. 10871, to read as follows:

Provided further. That except when necessary in order to provide qualified band leaders for authorized bands, no vacancies in the grade of warrant officer shall be filled until the number in such grade is reduced to six hundred, and thereafter the number shall not be increased above six hundred, in addition to those authorized for the Army mine planter service.

Senator HARRIS. General, if you would send us a copy of that just the way you want it it would be well.

General McRAE. Yes, sir.

Senator HARRIS. That and any other places where you want any change of language in the bill, I think, it would be well if you would send it to us.

General McRAE. I could leave this copy right here.

Senator HARRIS. I was thinking if you would make some slips that we could paste in.

General McRAE. Yes, sir. Of course, the law provides that the band leaders should be warrant officers. Now, most of these warrant officers that we have were appointed as a reward for their services as temporary officers during the war or for exceptional services as noncommissioned officers before the war. They were not band leaders, they were not field clerks, they were outdoor men, and they are good to handle men, etc.

Senator HARRIS. They were noncommissioned officers?

General McRAE. Before the war they were noncommissioned officers and temporary officers during the war.

Senator HARRIS. And rendered splended service, too.

General McRAE. Rendered splendid service.

It is contemplated under the present law that field clerks will go out of existence as the present ones are absorbed or as the vacancies occur, and the warrant officers will take their places; but we haven't gotten yet to appointing warrant officers who have the qualifications as field clerks; they are outdoor men. Nor have we appointed them on account of being qualified as band leaders, except where they were appointed for that particular office, a band leader. So we would not be able to get band leaders out of these 600; that is, as a warrant officer who is a band leader would go out we could not replace him with the ones we already have. It would be necessary for us to have a provision authorizing, in addition to the 600, the appointment of such number of warrant officers as necessary for band leaders.

ARMY FIELD CLERKS.

There are now 377 Army field clerks in the service, and they perform the duties of clerks at the headquarters of corps areas and departments, and at certain service schools and other stations of the Army. Some of these field clerks were formerly civil service clerks for many years, and by their transfer in accordance with act of Congress, lost the rights for retirement they would now have as civil service clerks. The reduction of the number of field clerks from 377 to 230, as provided for on page 20, lines 4 to 8, H. R. 10871, would seriously interfere with necessary clerical work at corps area and department headquarters, and would also be manifestly unfair to the men discharged.

The number of field clerks is being gradually reduced by death, discharge, and resignation. As the numbers are gradually reduced in this way, no new appointments can be made, but places can be filled by warrant officers, who then have time to learn the duties of clerks. But wholesale replacement of field clerks by warrant officers who are not trained for the work required would be detrimental to efficiency.

It is therefor recommended that lines 4-8, page 20, be changed to read as follows: "9 at \$2,000 each, 43 at \$1,800 each, 77 at \$1,600 each, 106 at \$1,400 each, 142 at \$1,200 each, and 80 messengers at \$720 each." This would take care of those we now have.

Senator HARRIS. You want the same number you have at present except for the \$1,200 class?

General McRAE. Yes. The same number in each class.

Senator SUTHERLAND. How does that compare with the Budget?
General McRAE. I do not know, sir, about the Budget. These are the numbers that are actually in the service now.

Senator SUTHERLAND. The 377?

General McRAE. Yes, sir.

Senator SUTHERLAND. Is that the number that was estimated for in the Budget?

General McRAE. Yes, sir.

Senator SUTHERLAND. And the House reduced it?

General McRAE. The House reduced it from 377 to 320 and provided that the surplus ones be discharged at once.

There is one other thing that I have to discuss.

On page 23, lines 12 to 21, of H. R. 10871, there is continued an appropriation for "Transportation of wounded and otherwise disabled soldiers, sailors, or marines when traveling on furlough." This appropriation was of great value when the wounded of the World War were given furloughs, but its main usefulness ended when all these men were discharged. The Secretary of the Navy concurs in recommending that this item be eliminated from the appropriation bill, thereby effecting a saving of \$25,000.

Senator SUTHERLAND. How much more have you there, General?

General McRAE. That is all, Senator. I have a table here, showing the distribution of officers according to various activities, which I would like to submit.

Distribution of commissioned personnel to activities.

Branch or activity.	Authorized by law.	Required by tables of organization.	Actual condition Mar. 31, 1922.				Required by tables of organization.
			Commissioned in—	Detailed to—	Detailed from—	Remaining at disposal of activity.	
General officers.....	73	68	67			67	68
Infantry.....	4,201	2,709	4,090	1	1,247	12,844	2,709
Cavalry.....	951	721	1,202		429	1,773	721
Field Artillery.....	1,901	1,039	1,232	2	270	1,964	1,039
Coast Artillery.....	1,201	972	1,048	1	379	1,710	972
Air Service.....	1,516	1,552	907	60	59	1,908	1,552
Engineers.....	602	392	508		115	1,393	392
Signal Corps.....	301	144	152	49	30	1,171	144
General Staff.....	219	219		195		196	219
Adjutant General's Department.....	117	117	2	102	9	95	117
Inspector General's Department.....	62	62		36	3	53	62
Judge Advocate General's Department.....	115	115	113	1	19	95	115
Quartermaster Corps.....	1,054	1,054	988	32	37	983	1,054
Finance Department.....	163	163	148	4	9	143	163
Medical Department.....	1,499	1,675	1,675		116	1,559	1,675
Ordnance.....	353	353	288	24	26	286	353
Chemical Warfare.....	101	101	86	2	5	83	101
Insular Affairs.....	3	3	1	2		3	3
Philippine Scouts.....			146		2	144	
Chaplains.....	139	139	179			179	139
Professors.....	7	7	7			7	7
Military storekeeper.....	1	1	1			1	1
Detached officers' list.....	2,108						
Organized Reserves.....		1,151		270		270	1,151
National Guard.....		877		233		233	877
Reserve Officers Training Corps.....		700		642		642	700
Faculty War College.....		22		22		22	22
Faculty General Service School.....		74		59		59	74

¹ In these totals are included student officers at Special Service Schools as follows: Infantry 464; Cavalry 155; Field Artillery, 221; Coast Artillery, 80; Air Service, 124; Engineers, 92; Signal Corps, 21.

² 716 for next fiscal year.

³ 704 for next fiscal year.

Distribution of commissioned personnel to activities—Continued.

Branch or activity.	Author- ized by law.	Required by tables of organi- zation.	Actual condition Mar. 31, 1922.				Required by tables of organi- zation.
			Commis- sioned in—	Detailed to—	Detailed from—	Remain- ing at disposal of activity.	
Students, War College.		65		90		90	65
Students, General Staff School.		95		73		73	95
Students, School of the Line.		180		192		192	180
United States Military Academy		185		172		172	185
Recruiting Service.		74		49		49	74
Disciplinary barracks.		40		26		26	40
Aides.		148		71		71	148
Sp. troops, Infantry and Cavalry							
Divisions.		42		16		16	42
Postal officers.		14		2		2	14
Panama Canal.		14		14		14	14
Alaskan Rd. and Eng. Com.		4		3		3	4
D. C. Commission.		4		4		4	4
Office of Assistant Secretary of War.		26		38		38	26
Federal Power Commission.		3		3		3	3
I. and C. Waterways.		5		3		3	5
Veterans' Bureau.		7		7		7	7
American Relief.		16		16		16	16
Assistants G. S. Corps A. and depts.		89		58		58	89
Military Attachés (other than G. S.).		43		27		27	43
General depots.		38		20		20	38
War Department miscellaneous (G-2, O. C. S., etc.).				38		38	
A. F. in G. miscel.		25		25		25	25
Students, foreign language.		11		11		11	11
Miscellaneous.		40		40		40	40
Total.	16,677	15,601	12,880	2,755	2,755	12,880	15,601
Distribution:							
General officers.	73		67				
Promotion list.	14,968		10,951				
Medical Department; chap- lains, professors, and M. S. K.	1,636		1,862				
Total.	16,677		12,800				

Senator SUTHERLAND. We will send you the transcript of your statement for revision before it is printed.

General McRAE. Yes, sir. Major Benedict has been designated to discuss more particularly, or make a comparison, between the provisions of the House bill and the Senate bill 3113 in regard to the number of officers, and the manner of reducing them down to the proper number in each grade, and he has made an analysis of that and is prepared if the committee desires.

Senator SUTHERLAND. He will be here this afternoon?

General McRAE. Yes, sir; he can be here at any time.

Senator SUTHERLAND. I understand the time this afternoon is all taken up with other witnesses, and if it is thought well to have him appear before the committee at some later date, we will notify him. We will adjourn now until 2.15.

(Whereupon, a recess was taken until 2.15 o'clock p. m.)

AFTERNOON SESSION.

Senator WILLIS. Mr. Chairman, Congressman Fitzgerald will make the presentation of the matter in which we are particularly interested, and all that I say is simply to buttress what he shall say.

I am very greatly concerned about the appropriation for the maintenance of aviation, and have been interested in it for many years. I think it is one of the most important things that can possibly engage the attention of the appropriating committees. Naturally, in Ohio we are very particularly interested, because of the prominence our State has had in the development of this great forward movement, but I shall depend now upon Congressman Fitzgerald of the Dayton district, who is himself a flier, and who is in perfectly good condition, although he recently fell 3,000 feet, to give you the facts of the matter. Congressman Fitzgerald.

STATEMENT OF HON. ROY G. FITZGERALD, REPRESENTATIVE IN CONGRESS FROM THE THIRD OHIO DISTRICT.

Mr. FITZGERALD. Mr. Chairman, in taking a rather broad view of the present situation, I can not help but be impressed with a few facts in American history. It seems that the United States has been pretty severely punished for the neglect of the ingenious ideas of her own people. It does not make much difference whether we say that Fitch or Fulton invented the steamboat—America neglected to build it.

At the time of the Civil War's outbreak our clipper ships carried the bulk of the world's commerce on every sea; we had 50 per cent of the trade even in the Orient, in every far Eastern harbor. At the close of the Civil War, due somewhat to the activities of the Confederate privateers, but due more particularly to the development of steam navigation in which we had been extremely slow, we had no merchant marine, and have not had one since, and some of us are rather skeptical about our being able to acquire one.

It does not make any difference whether we say Maxim or Lewis invented the machine gun. We had sufficient genius in the United States to follow up Maxim's inventions, and to develop the ideas that Americans had, and we paid a tremendous penalty in this last war for neglecting it.

I remember my early instruction at Fort Harrison when the only machine gun we could get was a Benet-Mercier, a French gun. Germany was splendidly equipped, and England had the Lewis gun, which we still use on our airships, while we had in mind and in theory the finest machine gun in the world, which since the war we have developed, that is the Browning both light and heavy gun, which we use in a more stable way on our airships.

Take the submarine, Holland's name is linked with it so closely that no history ever could be written without tribute to his name, yet we neglected the possibilities of the submarine, and we paid a most tremendous price for our neglect. Without ignoring the work of Professor Langley, his pioneer investigations and experiments, the American people cherish with especial pride the immortal names of Orville and Wilbur Wright, the conquerors of the air.

After this plane of theirs had been shown to be a success by the 27-minute flight out here at Fort Myer, they could not get the United States Government to see its great possibilities. It seemed to be kind of a toy, unstable in the wind, could only be flown when the wind was just so, or when there was no wind, and without that vision which we sometimes pride ourselves upon not lacking in this country,

we declined to develop it here and they took this thing over to France where the Government seemed to have more vision and be willing to take more of a chance. A great monument now stands dedicated to the Wright Brothers at Le Mans, France, in appreciation for the great service which the Wright Brothers performed for the French people toward preserving their liberty in this late war, because the French did develop and work out the marvelous invention of Orville and Wilbur Wright.

This machine, this aircraft idea, invented in this country, we find in France at the time of the war developed to such an extent that they were able to lend and we were pleased to accept their poorer type of planes.

You read in that entrancing book of Eddie Rickenbacker's Fighting the Flying Circus how in the early days of the war our boys were equipped with the borrowed Nieuport planes, from which if they had to make a quick landing the fabric stripped off the wings, and how some landed successfully with the fabric entirely ripped off one of the wings, and then finally how Rickenbacker got to fly the better type of plane, a Spad, also borrowed from the French, and then came the story of our endeavor, and it was a splendid record during this war. We recall the feverish anxiety on the part of our people who felt their great strength and did not seem to realize that with a million, a billion dollars of money appropriated we could not put ourselves on a fair and even footing with these foreign nations. With all these billion dollars appropriated we never were able to put one single combat plane on the front in France, and it was not the fault of our organization, nor of our engineers, nor the lack of funds and capacity for work on this side of the Atlantic, but we find that this thing can not be done in a very short time. It requires not only a great deal of time in research and experimentation, but when the proper thing has been determined (and it is getting more and more complex as the days go on), there have to be jigs and dies made in order to obtain quantity production, and special tools and machinery provided in order to get into quantity production to manufacture planes at anything but a prohibitive cost and in any reasonable time. And so our boys had to be supplied with French airplanes, manufactured in France under the trying conditions of war times in order to do what little they were able to do in behalf of the Allies and this associated Nation during the war.

The question before this committee at this time is how much money that research department of the Army ought to have. I consulted Major Bane, "our greatest expert," to quote Major General Patrick, when it was suggested by the members of our subcommittee that the organization at McCook Field could not spend profitably all the money that had been appropriated the year before. Investigation showed that the Director of the Budget had asked that a certain saving be made in different departments of the Government. In the aircraft part of the War Department's division of responsibility it demanded that a million dollars be saved. It was ordered that \$400,000 be taken off the last year's appropriation for the experimental and research work, and that money was taken off, and immediately some 250 to 700 men were discharged, and the work was crippled, the most important activity for safeguarding the Nation.

Just briefly I want to indicate something of the great complexity of this thing, because I was met by the chairman of our Committee on Appropriations with the suggestion that they were attempting to do too much; that is, they were attempting to develop too many sorts of engines; that if they would just select the best type then it would be more economical, and they would get along just as well, but that it was wasteful to try so many things. As if the way to find things is to restrict the search.

I then took the matter up with Major Bane, the commanding officer at McCook Field, and I had him certify to me every type of engine which they were attempting to develop there and the amount of money which could profitably be expended for research work. I mean by that economically profitable for this country, both commercially and as a means of national defense. His figures are \$10,000,000.

I went out and talked to my most distinguished fellow citizen Orville Wright, because it had been suggested in the argument in the House that those two Wright boys in Dayton did not have any such great sum of money and that they developed and learned to fly the airplane without any such great amount, and that it was ridiculous to spend such an enormous amount as \$4,200,000 approved by the Budget Commissioner on the request of the Army, for research and experimental work. So I asked for an expression of opinion from Orville Wright as to whether or not this amount of money could be profitably expended and he answered "more than the \$4,200,000," approved by the Budget Commissioner, and he put it in writing and signed it.

As I say, the amount which could profitably be expended in a year at McCook field is set at \$10,000,000 by Major Bane, and if he has been before this committee, as I assume, he has at sometime you will know he is not a romancer and is not so set upon his own idea that he can not take a broad view of the whole situation and appreciate the economic conditions of the country.

This matter has become more complex since the days of the Wrights. Of course, they had a number of factors to consider in making a machine which would sustain itself in the air in flight, but I want to call your attention now to how complex this thing has grown, and how many things enter into the problem.

In the first place, the machine that can climb most quickly and highest into the air gets control of the air. We may adopt that as fundamental.

During the days of the war the ceiling of the planes was about 20,000 feet, which is about the highest that a man can keep his senses without artificial means of respiration. We were at a great disadvantage during the war with all the planes except a very few. The Germans could come over the lines, take photographs of the strong points, of the trenches, of the roads and passes where troops might be moved, and without going into detail about the conditions, it resulted in such ill feeling that our Infantry were accustomed to fire upon our own aircraft when they did see them, protest against what they thought was their cowardliness and inefficiency. Of course, our flyers were not to blame.

Since the war there have been enormous developments in aircraft such that it seems like the unfolding of a miracle to go to McCook

field—where all of us ought to go—and see what is going on. Some of it is open, much of it is confidential.

In regard to the ceiling, there are three elements that enter into the height to which a man may go. There is the man himself, the plane, and the engine. The man, after he goes a little above 20,000 feet, must have artificial respiration. Of course, we are familiar with that in medical and surgical work, and, of course, an oxygen tank can readily be and is provided.

The next thing experienced when one gets up to a great height is the intense cold and the man must be protected from the cold, and we have the electrically heated suits and the cockpit heated by the exhaust from the engines.

Then we find that moisture collects about the eyes and on the goggles and blinds the man when he gets to great height; it freezes. And so a kind of goggles has been devised which is frost proof and which a man can wear, and on which no frost will form, and it is heated by a little electric current around it; and it is coated with a certain composition which, I think, we got from the Germans, to tell the truth.

Now, those things in regard to the man.

Then, in regard to the plane. We know that the density of the air on the earth's surface is very much greater than that of the air when we rise to these heights. We know that the engine itself must have artificial respiration to make the proper mixture of air and gasoline. Any of us who ride in automobiles knows that in wet and damp weather and in cold and dry weather there are differences and a carbureter has to sometimes be adjusted in the sort of rough way in which we use automobiles.

And right here I might say that the difference between the engine in the air and the engine we use for trucking and heavy work on the surface of the earth is enormous. It is 20 pounds to 1 horsepower for the engines in use in trucks and automobiles, and we have engines for aircraft where we develop 1 horsepower for each 2 pounds of weight, and this research work promises even more wonderful results.

Now I turn to the plane. We find, on account of the rarity of the air, that the propeller does not work well. Some of you know if you use a propeller in water you may turn it so fast that you churn and have a sort of an emulsion of the water and the propeller does not take hold. The same thing occurs in the air. You can turn the propeller so fast that it churns up the air, but exerts no pull. Consequently all these things have to be studied. And as the density changes these conditions have to be met. They have been met for the first time since the war, and we have a propeller developed at McCook Field that not only has a variable pitch, but which can actually be reversed, which is of enormous advantage not only for the reasons I indicated in changing from one altitude to another but in making landings with fast planes, for the reason that the minute the machine touches the ground the propeller in reverse slows up the machine, which will be of special advantage on airplane carriers at sea and wherever the landing space is limited.

Now, as to the density of the air. We have put a man at McCook Field over 40,000 feet in the air, the world's record. There the

air pressure is only 3 pounds to the square inch as compared with 14 pounds to the square inch where we are now sitting. You can imagine what the sensations and feelings of a man must be up there, because his flesh becomes soft. You know you can put a mouse under a bell jar and remove the air quickly and the mouse will burst. And a man to get up that high has to go up slowly, fortunately; but when he gets up there his flesh becomes soft and flabby. It is 50° below zero where we put that man who was the pilot of the machine the day I fell through the clouds in West Virginia on the occasion to which Senator Willis has just alluded.

Now, we have the conditions of the plane itself, we have the conditions of the engine, and we have the conditions of the man. All of these problems have been solved until we have put a man farther off this earth than any human being has ever been, because we have developed at McCook Field a supercharger, which compresses even the thin atmosphere of that high altitude to the density of the atmosphere at sea level, and not only permits the engine to run at all but permits this engine to run at its normal horsepower on the earth's surface. And this means something in addition. At that altitude, on account of the lack of pressure and density, on account of the diminished air resistance, a plane which can maintain its normal horsepower can travel at an immensely increased speed. A plane that could travel at, say, 120 miles an hour near the surface of the earth can travel 250 miles an hour at that altitude. We have not perfected all the devices which will be necessary to permit machines to climb to that altitude and to travel at that speed, but we are right on the threshold of most marvelous discoveries.

I want now to talk about something in regard to these types of engines. We have five kinds of airplane, all with distinct uses. We have, first, the observation plane, and that is really what they first thought the plane would be limited to during the war. This is the plane that goes out and takes the pictures of the enemy's entrenchments and makes the reconnaissance that no other scouting or reconnaissance party could accomplish, and from the observation plane they also direct the fire of the Artillery.

We go next to the pursuit plane, which is the combat plane, and upon which we must depend for supremacy in the air. This sort of plane must be fast, it must have maneuverability; that is, it can not have the stability of the observation plane nor the bombing plane; it can not have that dihedral pitch of the wings which gives the stability and other features which make planes safer, because it must maneuver quickly, it must change its direction, must go up and down sidewise, and respond readily to its controls; it must be equipped with certain kinds of weapons, it must be protected against the fire of ordinary machine guns and rifles, and not readily set on fire.

And that being the second type, we pass on to another type of airplane, which we call the bomber plane.

Senator LENROO. I think you might assume the committee is familiar with those.

Mr. FITZGERALD. Yes, sir. Then, passing over the types of planes. I want to say just a word about something that is going on in the world. I assume that since General Mitchell has returned from Europe you may have learned something of the development abroad.

seen some of the pictures exhibited by him, and have noted the wonderful change that has come over some of the ideas of engineering construction and even the idea of storing passengers in the wings of the plane and putting the engines in the wings, and the 2-ton bomb which can carry more than a ton of T. N. T. explosive.

At McCook Field we are developing an airplane which will be, in effect, an aerial torpedo, one which may be controlled from the ground and will carry a very great load of explosives and can be directed from a remote control, pass from sight, and be directed above or on the target and exploded. This is not perfected to the point where it is practical, but this work is important for matters of this kind. They have on exhibition at McCook Field for those who are scientifically inclined, a little car that can do seven different things, all controlled by radio. That is not new to this body, because we have seen the *Iowa* controlled from 5 miles distant by the *Ohio* at sea.

Now, we have a revolutionary idea in engines which is being worked up. For these five types of planes different kinds of engines are required. There has lately been discovered a type known as the Almen engine. It is in the form of a barrel or keg, and it works with the wobble plate between 18 cylinders, 9 at each end. It is the greatest advance in engines that has occurred in years, if it proves to be a success, which is apparently imminent.

Another thing which is now being worked on is the air-cooled engine. The air-cooled engine, as we know it in the automobile, especially in the popular type of car, the Franklin, is only 50 per cent efficient. No such engine as that can be used in an airplane. There are experiments going forward which indicate there will be a rapid development, and we are right on the edge of discoveries along those lines.

On some of these matters, we are away ahead of Europe, and on others they are ahead of us.

Now, turning to something new and more or less confidential, we all know that Great Britain has offered a prize of £50,000 for a successful helicopter.

What would that mean? It would revolutionize the whole thing, because now the great difficulty is from lack of fields from which one can take off and land. Planes now require so great an area to provide for landing always against the wind (the only safe way), that if a way could be found to rise vertically and so descend safely the advantage would be of incalculable value. Now, the helicopter is approaching a degree of improvement where it seems to be on the verge of success.

(Here certain confidential statements were made.)

Mr. FITZGERALD. With reference to this observation work, besides having put this man over 40,000 feet off the earth, a feat which no other nation and no other combination of people ever equaled, we have put three men 26,000 feet off the earth in a plane developed at McCook Field, and we have developed a camera which has successfully taken a practical photograph 30,000 feet off the earth, sufficient for all military needs. This camera and this work are such that it puts us in the forefront of all the nations, as far as successful use of an airplane is concerned.

I can not touch, of course, upon helium gas and the importance of the lighter-than-air craft that are the trucks for the aircraft. With

helium gas, of which we have a monopoly in this country, we can carry in safety tons and tons of material. We can move a base over mountains with airplanes and all. It is perfectly practical to put 25 planes under a great balloon and carry the planes, and it is apparently practical now, from the experiments already made, to have the planes take off and land from these great gas ships; hooked underneath. I presume that some of you have seen the photographs taken by and in the possession of General Mitchell on this subject.

I have spoken rather hurriedly, and I have not read this letter from Major Bane, which discusses the different types of engines being developed, because it is probable that this committee does not think along the particular lines that the other committee did; that it is not questioning the number of types of engines that are being experimented with. But I have roughly stated not the wishes of the local people near McCook Field, but have attempted to present the importance of this research work in its national aspect, and coming from this city of Dayton, I hope that I may not be accused of simply having a local interest in my local merchants, as I was accused in the House, because I have made it my special duty to know what is going on of importance to this country in my immediate community. To restrict and limit this research work now will cause this Nation to incur great loss. It is false economy.

I thank the committee very much for the patience with which they have listened.

Senator WILLIS. That is all, Mr. Chairman. Thank you all very much.

Senator WADSWORTH. The committee will hear the military training camps next.

MILITARY TRAINING CAMPS.

STATEMENT OF MR. H. C. STEBBINS, REPRESENTING THE MILITARY TRAINING CAMPS ASSOCIATION.

Mr. STEBBINS. Dr. Henry S. Drinker, president of Lehigh University, and Capt. A. S. Cosby, executive secretary of the association, and myself are a committee representing the Military Training Camps Association, and are appearing before you to ask for an increased appropriation for the reserve elements of the Army; that is, for the R. O. T. C., the civilian training camps, and the Officers' Reserve Corps.

Senator SPENCER. Have you the page where that would come in?

Captain COSBY. Page 12, Senator, line 15.

Senator SPENCER. Civilian military training camps.

Mr. STEBBINS. That is but one of the four features of the Organized Reserves. The R. O. T. C., page 11; the civilian training camps, page 12; Officers' Reserve Corps, page 17; and enlisted reserves, page 19.

This association, as you know, is purely civilian, supported by voluntary subscriptions, and is intensely, patriotically interested in national defense, and has done unusual service many times.

If I may do so, I wish to quote from a statement made by the President of the United States on the 13th of June, 1921:

Our present national defense law establishes an economical and democratic military policy thoroughly consistent with our national conditions, provides for a small Regular Army to be augmented by great citizen forces.

These great citizen forces it took a year to get ready for even moderate combat work during the Great War. and I doubt very much if we would have allies holding a line for a year in the event of another catastrophe, but these great forces, according to the House bill, are allotted only 2.1 per cent of the Budget.

Senator WADSWORTH. You mean of the amount of this bill?

Mr. STEBBINS. Of the amount of the House bill; yes, sir.

It seems to me that that fact serves to illustrate that the excellence of the Army reorganization act for making trained citizens the principal feature of national defense is yet to be recognized, and certainly utterly inadequate appropriation has been made to that end.

I wish to deal very briefly, if you will let me, with the amounts of money involved.

The R. O. T. C. you are all familiar with. The Budget calls for \$4,000,000; the House has decided upon \$2,750,000. The Training Camps Association asks you specifically to increase that by \$1,000,000.

Doctor Drinker, who has been good enough to come here with this committee, and who is president of Lehigh University, and is conversant with the R. O. T. C. movement since its incipency in 1913, will speak to you more in detail in regard to that matter.

The next item on the Budget is civilian military training camps. Last year the appropriation was \$900,000. We had 80,000 applications for those camps, voluntary applications from young men; we had 40,000 signed-up applications; and we were only able to take care of 11,000 young men at camps.

This year we asked for \$2,700,000, three times the amount. That has been cut by the House to \$1,800,000. This association requests you to put back that \$1,800,000 to the exceedingly small sum of \$2,700,000.

For the Officers' Reserve Corps there has been appropriated \$250,000. That will allow, roughly, 800 officers 15 days' training. You have 65,000 Reserve Corps officers. Training 800 of the 65,000 is a pretty small proportion.

For the enlisted reserves I believe the House has appropriated \$100,000. All told, the House has appropriated \$4,800,000, which is 2.1 per cent of the entire appropriation bill coming from the House for this great citizen force.

The increase which we request you to make is in total \$3,650,000.

With regard to the Officers' Reserve Corps, I hesitate to ask any particular figure. I do not know how valuable you consider them to be. I do not know whether you want to hold them or not, but if matters go on as they are you will not hold them.

You have made it obligatory, in case a man is called for duty, to serve for 15 days in each year. That is a perfectly ridiculous length of time. I would suggest, so that no greater hardship shall rest upon Reserve Corps officers, that he be called every other year for 30 days. That will allow him, in the first place, to supplement officers of the Regular Army, not only in these 30-day camps, but it will give him actual duty with the troops. Some will elect to do that; others may elect to go to school; and it is a shame that the officers with the Reserve Corps who have splendid records in the war should not be allowed to continue their efficiency by going to Benning or Knox or Riley or Sill, as the case may be. You have the most valuable possible property among your Officers' Reserve Corps in case

of another emergency. It seems to me that they should be cared for, that they should be enabled, if they are willing, to take up further courses, to keep up with the work and to be fit for any occasion. The only way that can be accomplished, in my opinion, is by actual service with troops, except among the more brilliant, who may choose to be and can be detailed to the reserve schools.

Senator SPENCER. Do you not think, Mr. Stebbins, any good would come from the 15-day course?

Mr. STEBBINS. Why, Senator, I do not want to say that no good will come from it, of course.

Senator SPENCER. Did not the National Guard for a number of years, until comparatively quite recently, only have 7-day summer camps?

Mr. STEBBINS. Well, I think very little of that, sir.

Senator SPENCER. You do not think the time is long enough to really accomplish much?

Mr. STEBBINS. No, sir; I do not. You just get shaken down into your surroundings and begin to know the men you are in command of, or something of that sort, and the time is up. But you make a 30-day period every two years, then you allow an officer of the Reserve Corps to serve at one of these civilian 30-day camps, in a National Guard 30-day camp, or an R. O. T. C. 30-day camp, and be of service to himself and to the establishment and accomplish something.

I also think it would be wise if those Reserve Corps officers were not definitely called to duty. I have investigated this very carefully. A good many of them are younger men. During August, in mercantile affairs and in the bond houses generally, men are traveling—and a great many of the younger men travel on business—and are away from home on these business trips during August, and can not serve at that time.

An officer could not stay in the Reserve Corps and be called to duty during August, when he probably could and unquestionably would go in May.

So if you will give a Reserve Corps officer an opportunity to do what suits his livelihood best, you will keep your Reserve Corps personnel intact, whereas if a man is called and he just can not go, he would rather take the consequences and not go, and August is a month, as I say, when most of the younger men engaged in business are on trips, traveling in connection with business.

I should consider 1,000 men from each corps area, 9,000 men this year, would be a minimum. If you desire to keep your Reserve Corps in good shape, we would need about two and one-half million dollars, and I hope very much the duty can be done in a voluntary manner instead of ordering a man to duty. I feel that no provision has been made by the House for the Officers' Reserve Corps. As I say, the \$250,000 which has been appropriated seems to me an absurdity if that matter itself is of value and if you desire to hold them.

This increase that we have requested brings the total appropriations up to slightly less than 4 per cent of the entire authorized expenditure, which, it seems to me, is small enough. If the matter is well worth while, it ought to be worth 4 per cent.

I wish to speak a minute also in regard to the civilian training camps. We had these 11,000 boys in the camps last year; almost all

are coming back to the white camps this year. If we can, with this appropriation, only take care of 20,000, we have already got 10,000 and we can only have 10,000 more; and you are getting nowhere with your plans, you are not increasing your plans. You have got 10,000 already, and you put another 10,000 in camp and your appropriation is gone.

You are obligated to these men who went to the red camp that they shall have permission to go to a white camp this summer, and they are practically all going. They must be taken care of. They cost \$900,000 last year and will cost \$900,000 this year, so you only have the 11,000 you can take care of in your red camps. Well, that does not spell progress to me, if you really intend to make these great citizen forces something that is worth while.

And the President and Secretary Weeks and General Pershing have all said they hoped we would eventually have 100,000 boys in camp each year. We are not getting anywhere near that; we are not progressing. If you can put 40,000 boys in camps this year you will be making headway. If you put 30,000 in you will be making headway; you will double up on last year. But if you appropriate \$1,800,000 you are obligated to 11,000; you get 11,000 in the red camp, and you have not advanced one iota.

Senator LENROOT. They do not come back for the second camp, do they?

Mr. STEBBINS. Eighty-two per cent have signified their intention of coming back.

Senator WADSWORTH. Does your association do any recruiting for this movement?

Mr. STEBBINS. We are afraid to do a thing. We have 1,400 subcommittees that are afraid to do a thing. We can get you 100,000 boys just as readily as last year we got 40,000 and the Government took care of 10,000 and that 30,000 were disappointed and do not know why they were not taken. We can get 100,000 applications and take care of 30,000 in training.

Senator WADSWORTH. Do you expend the funds of the association in taking care of recruiting?

Mr. STEBBINS. That is done at our own expense. We are intensely interested in the subject.

Senator WADSWORTH. Are you acting in cooperation with the War Department?

Mr. STEBBINS. Yes; we are; because this year in each regimental area they have a recruiting officer who is attending to the recruiting for the War Department itself, and we are working in each corps area and down into each regimental area and helping every way we can.

Senator SPENCER. Does the War Department give you the printed matter?

Mr. STEBBINS. The printed blanks; yes, sir; the application blanks which we distribute as well as circulars.

Senator SPENCER. That little booklet, is that a War Department publication?

Mr. STEBBINS. It was last year, but the Government can not take care of these young men who volunteer their 30 days' service, and unless you get the money for it it will be a failure. You can not dis-

appoint 40,000 boys a year and continue along this line and be successful.

Senator LENROOT. Mr. Stebbins, if you can get 100,000 applications for the training, do you think the time has come when they should be required, in consideration of receiving that training to obligate themselves to join the Reserve Corps?

Mr. STEBBINS. It is a physical impossibility to train them.

Senator LENROOT. That was not my question. My question was whether it should not be a requirement that in consideration for getting this training they should join the enlisted reserves, because they are under no more obligation to join now after this training than any other citizen who has not had it.

Mr. STEBBINS. I think the whole matter should carry out the thought of the word "voluntary."

Senator LENROOT. Do you think the Government ought to train a half a million or a million who desire this training, supposing there is that number, without that obligation?

Mr. STEBBINS. I think you should build up a third component part of your national defense act.

Senator LENROOT. It is not the third component part unless they go into the enlisted reserve or the Officers' Reserve Corps.

Mr. STEBBINS. I think men will go through this training and where they can will join the National Guard; and I think where they can not they can be induced to join the enlisted reserve without any difficulty whatever, but I would not force it upon them. I think you lose the sense of the word "voluntary" and the spirit of it.

Senator LENROOT. No; it would be a voluntary enlistment just the same.

Senator WADSWORTH. It would still be voluntary in the first instance?

Mr. STEBBINS. Yes; in the first instance. I would carry it through voluntarily but induce them to join, and I think a good portion of them would. Of course, primarily, if they can join the guard, so much the better; but, of course, there are very many places where there is no opportunity for a young man to join the guard, as there is no organization for him to join.

Senator LENROOT. He could join the Enlisted Reserve Corps.

Mr. STEBBINS. Yes; he could join the Enlisted Reserve Corps, and I am quite convinced a very large majority will do it.

Senator SPENCER. Mr. Stebbins, if we send a boy to Annapolis or West Point we are not presumed to send him there unless it is his real intention to make the Army or the Navy his life work. Now, Senator Lenroot's point is that the Government ought not to go to the expense of training a boy at the summer camps unless as a result of that training he voluntarily agrees that when he gets the training he will then identify himself with the enlisted reserve or the State National Guard or the Officers' Reserve Corps. I think that is a fair thing to follow from the summer training.

Mr. STEBBINS. I think it is fair. I personally believe, after we get the matter well started, and have camps of good size and get it out of its swaddling clothes, I would make it a compulsory matter, but I would not do it to-day.

Senator SPENCER. I think that is the exact idea of the Militia Bureau, to run it along without any obligation for a time, until it is

so much in favor with the young men that they will be very glad to accept that condition as to future training as a condition of going to the camps.

Mr. STEBBINS. There is a very curious reaction about this question of voluntary training which is exceedingly pleasing. Boys are beginning to spread it about that they ought to go, and as time goes on and there are opportunities for larger camps and more camps are established, we have young men who go through a 30-day camp, and they are talking it among themselves. I think it may work out in a splendid way. I think we may easily get 100,000 boys into camp each year. Once started, once that spirit is established, once you find that a great many more boys want to go than can go, and all that sort of thing, then I think you can make a compulsory matter to join the enlisted service. I must say I quite agree with Senator Lenroot that there should be an obligation of some sort for what the Government has done, but I think, perhaps, it would be unwise until we get under a little better headway than at the moment.

I think I have placed our thoughts before you concisely and at sufficient length. I also think this association has been amazingly moderate in what it has asked you to do. If the plan of training citizens is a good one it is worth doing on a larger scale, it seems to us, than the money appropriated at the present time by the House will permit.

If you choose to increase those figures which have been suggested to you I am quite sure we will be very agreeable, and if you will permit, Mr. Chairman, I would like to ask Doctor Drinker to speak to you on the R. O. T. C.

Senator SPENCER. Let me get your figures straight. For civilian military training camps you desire an increase to \$2,700,000?

Mr. STEBBINS. Increase to that; yes, sir.

Senator SPENCER. Officers' Reserve Corps, you made no estimate on?

Mr. STEBBINS. I suggested \$2,000,000 on the basis it will allow 1,000 men in each corps area. That will be 9,000 men out of 70,000.

Senator SPENCER. What about the Reserve Officers' Training Corps?

Mr. STEBBINS. The R. O. T. C., I request that to be increased \$1,000,000 over the House bill.

Senator SPENCER. Increased \$1,000,000?

Mr. STEBBINS. Yes, sir.

Senator SPENCER. And the enlisted men's reserve?

Senator WADSWORTH. Would you be satisfied with having that doubled?

Mr. STEBBINS. Well, we are going along very slowly with that, and until we get to a point where that is a factor, I would let it pass. It seems to me the \$100 is rather amusing. I do not know that it looks well on paper.

Senator LENROOT. It is a nominal amount put in to keep the appropriation alive.

Mr. STEBBINS. I see; yes, sir.

Senator WADSWORTH. Doctor Drinker, we would be glad to hear you.

STATEMENT OF DR. H. S. DRINKER, PRESIDENT EMERITUS OF LEHIGH UNIVERSITY.

Doctor DRINKER. Mr. Chairman, you, I know, sir, are, and I have no doubt the other members of the committee are familiar with the history of the development of this movement. It is now some nine years since Major General Wood, in the spring of 1913, sent out a circular letter, while Chief of Staff, to the presidents of a number of our colleges, asking them to join in a movement for the training of our youth in the military service and national preparedness. I remember receiving the letter with very great satisfaction. It seemed to me a splendid move for the benefit of the education of our young men. I was at the time acting as the president of Lehigh University, and we succeeded in interesting a number of presidents of other colleges and universities—Harvard, Yale, Princeton, and a number of State colleges, some 18 in all, to form a committee of university and college presidents to advise on this matter and promote its growth, and they all hailed it with a great deal of zeal and continued in the work and are still members of that committee, although not actively functioning this year.

As an immediate result of the four years' training in these summer camps, from 1913 to 1917, we have a right, I think, in the Military Training Camps Association to take some pride in the fact that we furnished between 15,000 and 16,000 officers in the Reserve Corps in 1917, at the time our Nation entered the war. They were men who had a record of having attended these summer training camps, and while, of course, that did not fully qualify them as officers, it did qualify them to enter the camps for subsequent training that the Government then instituted, and, as a matter of fact, our records, as I say, show that between 15,000 and 16,000 of the men who had been in our summer camps during those four summers served in the recent war as officers.

Speaking as a college president, I am here simply to say to you gentlemen that we men who have watched this thing—and I have now watched it closely and been identified with it for nine years—have not the slightest doubt of the educational advantage to our young men of this military training. There is no question it is a good thing. At Lehigh University we were so well satisfied with it that after one year's experience of voluntary training for young men in our unit the trustees and faculty joined in making the training compulsory for all freshmen and sophmores entering the university. Those are the men, as you know, under this work who take the basic course. Then in the last two years the men who wish to apply for commissions take the senior or advanced course. But at my institution we now compel every man physically capable to enter the military training course in the first two years, and we know that it is doing those fellows a great deal of good not only physically but mentally. The discipline is something that the average American youth needs, and he gets it in that way.

The growth of this movement has been to those of us who have watched it surprisingly great. To-day the records in the War Department show that there are 227 institutions which have active

units and there are 234 senior units, and then, as you know, there are a certain number of junior units in institutions which do not grant degrees. And it is the average college-bred man who has the education to enable him to take hold of this military training in such a way as to permit him to become an officer, and I do not know of anything in the world better for our own men who go to college than to go to these summer military training camps and meet with the men they find there who are not college men. There is nothing so democratic as that—the mixing of our men, the rich man and the poor man, the poor man and the rich man. They mix on terms of absolute equality, and it does them both good.

To-day, owing to want of money, the War Department was obliged in December last to issue an order that only 5 per cent of the men enrolled in what are called the basic courses—that is, the first two years courses—could be accepted at the R. O. T. C. camps this summer.

Gentlemen, that means a great deal to our country, to have those young men in those first two years have that active summer training in camps in addition to what they have in college, and it is a great loss to the country that that appropriation has not been large enough to enable them all to go, because whether, as Senator Lenroot said, there should be an obligation to serve subsequently or not, if our college men have the training of a good month in the summer camp under Army officers it means we have a backlog of intelligent young men able to serve and doubtless ready to serve, because our people are patriotic whether they take the obligation or not, and I beg to urge upon you the necessity of increasing the appropriation so young men in all colleges where it is compulsory—in colleges like Lehigh—to take the training, should have the benefit of this summer course, too, because that work caps the training they have been having under the military department of the college.

As to the cost, there is just one item I want to call your attention to. You gentlemen have probably had before you the cost of enlisting a man in the Regular Army and the figures in connection with the Regular Army work. The actual cost at Lehigh, by figures carefully prepared by the professor of military tactics and science, who is with me, is only \$45.70 yearly cost per student to the Government.

To-day the figures of the War Department show that there are some 95,942 students enrolled in colleges and the high schools of our country. Of them about 53,000 are in the colleges and universities and about 28,000 in the high schools and the others in some military schools and other institutions. Now, that is a great big back log, gentlemen, of what you might call the citizen soldiery of the country. It is not the question of the enlarging of the Regular Army, it does not mean making our Nation a military nation; it means having a certain number of our ordinary, strong, educated young men ready to serve if the emergency should come for it, and I am here on behalf of our colleges who are interested in this thing, to urge upon you that this is no experimental or new matter; it has been

going on for nine years, and I have a right to speak perhaps as a veteran in that service, having been actively in it for nine years, and it has grown upon us more and more how very valuable it is to the young man to have this military training, and for our country to have the back log of efficiency ready.

I do not know that there is anything more from the college standpoint. That is what I came to say, because I thought perhaps you would like to have the testimony of some of us who have intimately been associated with this training in the years it has gone on.

Senator WADSWORTH. Do you regard the presence of Army officers as essential?

Doctor DRINKER. We are sure of it. You mean in the training in the colleges?

Senator WADSWORTH. Yes.

Doctor DRINKER. We have six Army officers at Lehigh now for something over 600 men, and we ran for some time with a more limited number than that.

Senator WADSWORTH. Can you give us some idea as to the curriculum? How many hours a week do you have?

Doctor DRINKER. I asked Colonel Lang, our professor of military science and tactics, to come with me particularly in case you should ask that question. Will you permit him to answer it?

Senator WADSWORTH. Certainly.

Colonel LANG. Our classes run from 8 o'clock Monday morning until 4 o'clock Monday afternoon, the same on Tuesday, the same on Wednesday, the same on Thursday, the same on Friday, and up to noon on Saturday. We have drill at 6 o'clock in the morning on Thursdays so as not to interfere with athletics or let athletics interfere with us.

In addition to the regular curriculum, if any men are not physically qualified and can not take regular R. O. T. C. training, we are giving them radio training, such as an operator on a tramp steamer would have, practical radio work, and other men who are interested in it are taking work such as a quartermaster lieutenant or a quartermaster sergeant would have, so they could be utilized in an office during a war. Roughly speaking, we have at least two classes running every hour during the week.

Senator WADSWORTH. You say there are six officers?

Colonel LANG. Yes, sir; myself, four captains, and a lieutenant, and four sergeants, three of whom were officers during the war and the fourth of whom was not.

Senator WADSWORTH. And what are their duties?

Colonel LANG. Their duties are to act as instructors at drill, instructors in practical work, sand table, etc. They are instructors as well as aiding in clerical work, preparing material for problems and the like.

Senator WADSWORTH. Do you find that the students take to this work readily?

Colonel LANG. Yes, sir.

Senator WADSWORTH. Do you have rifle teams?

Colonel LANG. Yes, sir; we fired 16 intercollegiate matches this year. Next year we have 27 intercollegiate matches scheduled. We go out as far as California and as far east as Maine.

Senator SPENCER. Colonel, does not the Government give in the third year or later on some payment?

Colonel LANG. When a man signs up for the advanced course he gets commutation of subsistence, which is based on the ration allowance of the enlisted men. It now amounts to \$12 a month. We are in the third year at Lehigh and have 73 men taking the advanced course, and getting this commutation of subsistence.

Senator SPENCER. How many years precede the advanced course?

Colonel LANG. A man must have two years basic course.

Senator SPENCER. Then the advanced course?

Colonel LANG. Yes, sir.

Senator SPENCER. Doctor, did you take that into your estimate of \$45.70?

Doctor DRINKER. No, sir; I did not. That is a very proper correction.

Colonel LANG. No; that was not included in the Doctor's estimate.

Senator WADSWORTH. What is the nature of the equipment that the Government supplies these men?

Colonel LANG. A man is issued a complete uniform with the exception of shoes, socks, and underclothes. In other words, blouse, breeches, leggins, hat, flannel shirt, and belt.

Senator WADSWORTH. What other equipment is issued?

Colonel LANG. Each man has a rifle, belt, sling—full field equipment. We have really not one full field equipment for each man, but enough for instructional purposes. We have about 300 sets. Then we have two machine guns, four automatic rifles, one 37 mm. gun with cart, and one trench mortar. In addition to that, we have thirty-odd engineer sketching sets. Each man is supposed to give 20 per cent of his time in his second year, which is devoted to military sketching, and naturally we have to provide the equipment. The university has provided a great deal of equipment, such as sand tables for reproducing maps, and instead of going out in bad weather to put the problems on the ground we bring the ground indoors on a small scale; 1 inch equals 10 feet, or something of that sort, and a man can work his problem out just as well for disposition of reserves, etc., as outdoors, with much less of energy.

Senator WADSWORTH. We understand, Doctor Drinker, your contention is this appropriation would not permit a sufficient number of men to go to the training camp next summer.

Doctor DRINKER. The first two-years men; the later years men go as a matter of course.

Senator WADSWORTH. How are they divided at Lehigh?

Colonel LANG. I have the figures here. This year we have a total of 657 men who are now in the R. O. T. C. In addition to that, we have 53 who are taking what I call training with the R. O. T. C., but not actually in it. Of those, 73 are taking the advanced course.

Senator WADSWORTH. Under the terms of the House bill, as I understand it, the 73 would go to camp and only 5 per cent of the remainder, is that the idea?

Doctor DRINKER. Yes; of the first two-year men. The colonel spoke of three years. You understand that we have simply had the compulsory unit for two years. We will have a larger number probably for the last two years in another year, but we have only been going on it for the last three years as a regular part of the curriculum.

Senator WADSWORTH. And the disparity between the advanced course and the basic course will grow less?

Doctor DRINKER. Undoubtedly; but, of course, the advanced course will never equal the basic course. There will be a certain number who will take the two years and then will not continue. For instance, in the first two years it adds two or three hours to a man's work and in the last two years it will add five hours to his work.

Senator WADSWORTH. Do you give him credit on his degree for these courses?

Doctor DRINKER. It is part of the regular curriculum. A man must take these courses. Yes; we give credit for the last two years, but a man must take the courses in the first two years as part of his regular course.

Senator WADSWORTH. How many men were graduated from the advanced course at Lehigh last year?

Colonel LANG. We finished the second year of our existence last year, and we are finishing the third year this year, but we have six men who will be graduated and who will have completed the R. O. T. C. and they are going to accept commissions.

Senator WADSWORTH. You will graduate this year 73 approximately?

Colonel LANG. No, sir; those 73 are distributed between the six men who are graduating; the others are juniors.

Senator WADSWORTH. You can not tell what percentage of the whole will accept commissions?

Colonel LANG. We can not. I discourage any man who comes in solely for commutation of subsistence. He must state to me he is taking it because he is interested in the work or for patriotic reasons. In other words, there is a moral obligation on a man's part when he signs up for the advanced course.

Senator WADSWORTH. Any questions? We are very much obliged to you.

Major COSBY. Mr. Chairman, there is just a bit of verbiage in the bill that I would suggest be corrected.

Senator WADSWORTH. What is it?

STATEMENT OF MAJ. ARTHUR F. COSBY

Major COSBY. I have a short statement here in regard to page 12 of the bill. The Army appropriation bill as passed by the House provides for citizens' military training camps in the following language:

For furnishing, at the expense of the United States, to warrant officers, enlisted men, and civilians attending training camps maintained under the provisions of section 47d of the national defense act of June 13, 1916, as amended by the act of June 4, 1920, uniforms, including altering, fitting, washing, and cleaning when necessary, subsistence, and transportation, or in lieu of such transportation and of subsistence for travel to and from camps, travel allowances at 5 cents per mile, as prescribed in said section 47d, \$1,800,000.

It will be noted that this provides merely for: (1) Uniforms; (2) subsistence; and (3) transportation.

The budget for 1923, page 342, states the general object and date of acts governing the camps to be as follows:

For the expense of maintaining upon military reservations, camps, for military instruction and training of such citizens as may be selected and under such regulations as may be prescribed by the Secretary of War pursuant to section 54 of the act of June 3, 1916, as amended by the act of May 12, 1917, and as further amended by section 47d, act of June 4, 1920; for furnishing said

citizens, at the expense of the United States, uniforms, subsistence, and transportation, or in lieu of such transportation and of subsistence for travel to and from camps, travel allowances at 5 cents per mile, as prescribed in said section 47d; for such expenditures as are authorized by said section and may be necessary for the establishment and maintenance of said camps; for furnishing such equipage, tentage, field equipage, and transportation belonging to the United States as may be necessary; for arms and ordnance equipment, including overhauling and repairing of personal equipment, machine-gun outfits, horse equipment, ammunition, targets and their accessories for target practice, and for overhauling and repairing arms for issue and use in connection with said camps: *Provided*, That the funds herein appropriated shall not be used for the training of any person who is over 45 years of age (act of June 4, 1920, vol. 41, p. 23, sec. 47d), \$2,700,000.

It will be noted that this provides: (1) For maintaining camps; (2) uniforms; (3) subsistence; (4) transportation; and (5) expenditures necessary for the establishment and maintenance of the camps.

It is clear from the above that the language of the act as passed omits any provision covering the general subject of "maintenance and establishment." This is most unfortunate as the Budget further shows that the estimates for 1923 are itemized as being for:

General purposes	\$116,000
Subsistence	951,000
Transportation	777,000
Uniforms	855,000

In other words, while provision is made to transport the young men to camp, to furnish them with uniforms and feed them in the camps, no provision whatsoever is made for the "establishment and maintenance" of the camps themselves. While theoretically the camps are held at Army posts, where the general appropriations for the Army are available, practically every camp involves a very considerable special expenditure to put the camp sites in condition, establish proper camp sites and the expenditure of money for necessary activities of the camps such as water, latrines, kitchens, rifle ranges, bakeries, canteens and the post exchanges, recreation halls, gasoline and oils, freight for supplies, stationery, medicines in hospital, garbage disposal, etc.

Money is also necessary, before the young men can be obtained, to print application blanks, memoranda of information, under which they may be selected and ordered to camp; to print memoranda of information concerning the camps, which are requested all over the United States, from the young men themselves, their parents, employers, Senators, and Congressmen and others interested. As the work grows in number it is necessary to have extra clerks to handle the applications during the recruiting season, and it is also desirable to provide temporarily some increasing office facilities. The expense of all this is not great, possibly not more than \$100,000 for the entire country, but it is necessary work and has to be paid for by somebody.

The wording of this section, as limited by the House bill, would not permit 1 cent to be spent from this appropriation for any of the above purposes. We are quoting the experts. No matter what might be saved from the transportation or subsistence or uniform allowances made to each corps area commander for his camps, and no matter how desirable and even necessary were some of these small expenditures to make for the success of the camps, the corps

area commander would be helpless under this wording to spend a cent except for the three items named—food, clothing, and transportation.

Surely it would seem to be ordinary good business to have the wording of the law such that the whole amount appropriated, whatever it may be, was available for the camps. The precedents are in our favor. The national defense act, 1916, section 54, authorizes the Secretary of War to "maintain" these camps. The Army reorganization act, section 47d, continues this in force, and the appropriation bills of 1917, 1918 (there were no camps in 1919 and 1920), and 1921 all provide for "maintaining" the camps. The wording of the R. O. T. C. items is for the "establishment and maintenance." The act of 1922 was limited as at present, but we still had excess supplies and special funds available, and there were only 12 camps. This year there will be 31 camps, the excess supplies of many things are gone, the general Army appropriations are greatly reduced.

Unless the wording is changed we fear the success of the camps will be jeopardized. It is, therefore, urged that the wording of the bill be changed in accordance with the suggestion as made by the President in the Budget, as quoted above, so as to cover the items of "establishing and maintaining the camps," as well as providing for food, transportation, and uniforms.

Doctor DRINKER. Mr. Chairman, may I add one word to my testimony?

Senator WADSWORTH. Yes, indeed.

Doctor DRINKER. I wanted particularly to call the attention of the committee to the fact, as I said, that only 5 per cent. under the present estimate, of the basic men are permitted to go to camp: but that does not apply to my own institution, because we, having made military training a part of our curriculum, the War Department took that into consideration and our basic men do go to the training camp for this one year.

Senator WADSWORTH. I see.

Doctor DRINKER. I did not want to appear to have concealed that. Mr. STEBBINS. Thank you for hearing us.

Senator WADSWORTH. Now, the committee will hear the representatives of the Women's International League.

STATEMENT OF MR. S. E. NICHOLSON, REPRESENTING THE NATIONAL COUNCIL FOR THE REDUCTION OF ARMAMENTS.

Mr. NICHOLSON. Mr. Chairman, I may say we only have a few speakers, and all will speak, I think, very briefly. We have just asked a few of the organizations in our council to have a representative here to-day, because of the shortness of the time and the difficulty of reaching others. I think our speakers will speak for the most part, Mr. Chairman, touching the question of the size of the Army. I think their remarks will be addressed mostly to that phase of the bill that is now before you, and I will take the liberty of introducing some of the speakers, with your permission, Mr. Chairman.

First, Mrs. Glen Levin Swiggett, American Association of University Women, one of the officers of that organization.

STATEMENT OF MRS. GLEN LEVIN SWIGGETT.

Mrs. SWIGGETT. I have just come from the national convention of the American Association of University Women, and a resolution was passed there upon this question. As it was passed by the association it was that the personnel of the Army and the Navy be reduced to a point necessary for police purposes only.

I may say that the resolution presented to the convention by the resolutions committee asked that the personnel be held to 100,000 men in the Army and 65,000 in the Navy, but when it came to the floor the convention passed it, as I have presented it.

I think there is nothing more I can say about that. I should like to say just a word about the association itself, which is 40 years old, and has always been a conservative, constructive organization. It has among its members very many well-trained women, experts on almost every subject of investigation, because a part of the association's work is to encourage women to do research work. So when it passes resolutions it is always very careful. It is not easy to get a resolution through that association. After passing that resolution and others of a similar nature the association does not stop there. It feels that it is doing a piece of work that will assist, at least, in making these things possible; that is, it was instrumental two years ago in forming an International Federation of University Women. The point especially that it emphasizes there is that the intellectual cooperation is the easiest in the world, because there is not the competition that there is in other lines.

The International Federation of University Women is now made up of 15 countries, all the important ones, and Belgium. New Zealand, China, and Japan are now organizing to come in.

There are just three ways in which the International Federation works toward the point that helps in international friendliness: One is the personal contact made at their semiannual conventions; the other, which is very much more important, that the mothers and the teachers in all the countries interested in the International Federation are naturally influencing the thought in these various 15 countries and others to be added; and the third, which is very important, that the International Federation encourages the meeting of teachers and students and thereby the students living in that country for a solid period of from two to six years gain the impression, as we all know, of that country which they carry back home, and naturally that spreads.

The National Association of University Women hopes very much that just as much money as possible can be saved for constructive work and not destructive.

Mr. NICHOLSON. Mr. Chairman, I will next ask Miss Ethel M. Smith, secretary of the Women's National Trade-Union League, to say a few words.

STATEMENT OF MISS ETHEL M. SMITH, SECRETARY WOMEN'S NATIONAL TRADE-UNION LEAGUE.

Miss SMITH. Mr. Chairman and Senators, the National Women's Trade-Union League is an organization chiefly of working women. I think I need not emphasize now the working woman's vital interest

in avoiding war, and I may say to you that our organization feels that it was the doctrine of preparedness which has caused war, that it is the doctrine of preparedness that has brought so much trouble. We, therefore, are opposed to that doctrine, and we are opposed to extensive preparations for war. We are opposed to large armies. Personally, I can not see why if we are to have an army at all we should not have an army of millions, because I do not see how a few men or a few hundred thousand men could conduct a war for the United States, and I do not see why we should be afraid. This country, it seems to me, has little to fear. It is in a position to set an example to other nations of keeping the peace and of reducing its army. I do not see why we need 115,000 men. I am sure we do not need more than that.

Our organization would be glad to see the House bill even reduced in size and the expenses reduced. We feel that the money that is being spent to keep men in the Army could far better be spent on big public works which would relieve the unemployment that is now cursing this country. Men and women without work could better be kept on public works for peace-time reconstruction and peace-time industry than to put them in the Army and train them to kill other people.

We hope that you will keep this Army down to the very minimum, less if possible, than 115,000.

Mr. NICHOLSON. Miss Emma Wold, chairman Women's Committee for World Disarmament.

**STATEMENT OF MISS EMMA WOLD, CHAIRMAN WOMEN'S
COMMITTEE FOR WORLD DISARMAMENT.**

Miss WOLD. Gentlemen, I have nothing new to say to you; I have no figures to present to you. You will face the figures day and night from now on as you have been facing them. I only want to say what the women in large numbers, by the hundreds of thousands, are thinking about some of these things.

It is just a year ago to-day since a group of about one hundred women from different parts of this country called upon President Harding to present to him the request that he call an international conference for a consideration of disarmament, and at that time this same group of women urged the reduction of appropriations for the Army and the Navy. They were women who had come from all parts of the country; they were women from all ranks of life. If I should mention the names of some of them, you would recognize them as the names of those who stand for wealth and social position; other names would mean nothing to you, because they are the names of women of the middle walks of life or in the lower walks of life. But altogether, these women came animated by one purpose when they went to the President to ask that this country take the initiative in doing something which would prevent war. that we believed at that time would prevent war.

Women have been thinking about these things and they have been facing certain hard and cold facts. They realize that no facts are harder and colder than these—that war does not pay; that preparations for war have not prevented war; that preparedness programs have been precursors of war. And thinking about these

things as they go about, not only the woman who is a member of a club or an organization, but the woman in the small town who does her daily work, the woman on the farm—I know what I am speaking of because I have had letters from them, letters that are addressed from a rural route of some sort. They are thinking about these things and they face the matter with as cold a logic as any of you gentlemen meet any of the questions that come before you.

I say these are the facts. We have had war, we have had preparations for war, and it has not prevented war, and they have been thinking during these last few weeks about this international conference and the things that we have been told it will do for the salvation of the world, for the peace of the world, and with just the same sort of cold logic they say if these things that you gentlemen tell us are so, if war has been prevented for an appreciable number of years, why should we put our money into things which mean war. For we believe, as Miss Smith has said, that preparation for war does mean war.

I want to read you the words of Frederick Palmer, who has known war since 1897 as a correspondent in probably every war that has been fought on the surface of the earth since that year, and he has known the soldier and he admires the soldier, and this is what he says of the soldier's point of view. In speaking of the training of the soldier, he says:

The soldier must be set against a definite enemy and is prepared for him.

He begins by saying the soldier can not be properly trained unless he has a definite enemy that he expects to face in the future.

The soldier must be set against a definite enemy and is prepared for him.

So France has always been preparing against Germany and Germany against France. In our own nationhood we prepared against England. Before the World War we were preparing against Germany; after the World War against Japan. One enemy beaten, the soldier soon has another. There must always be one for the spirit's sake.

And so, as we look at that, we may not be able to put it into words of that sort, but we do realize as we look at the facts of the past eight years, which have opened our eyes to many things, that it is time to have a new vision. We need to revise the way in which we are looking at the world and wars in the past. The spirit which men pride themselves upon, and which women have been taught was the great spirit of manhood, the spirit which would make men go out and fight, that has been the ruling spirit, and we feel the time has come when that must not be so longer. And why? Because it does not pay.

Many of these new visions that we have, as you gentlemen know, come as the result of an economic urge, an economic drive, as the women look upon the men in our families earning the daily bread, clothing their families, driven by the necessity of getting enough to feed and clothe their families, and also to meet the heavy taxes which they are compelled to meet—we women, as we look at these things say it is time for it to end.

And, gentlemen, what I am going to say now I say with no spirit of veiled threat, but I can assure that the women of this country, organized and unorganized alike—and the organized women, as you know, number many millions—think seriously of the necessity of

making a political issue of this question of peace or war, and they look upon efforts toward securing a permanent peace as one back of which they must get with all the determination and energy that they have, and this measure which you have to face every year of providing for a large Army and a large Navy, these women regard as just one step, and we believe that every time some few millions are knocked off from those appropriations the country is better off—our country is safer. You have not tried it; we have not tried it. We have tried a large Army; we have tried preparedness, and it has not insured us against war. Now, we urge you to try with just the same sort of faith that you would undertake any sort of crusade—to try that faith, honesty, and sincerity another way, the way of a small Army, an Army just sufficient for the needs of policing our country, and we ask these things, we women, in the name of the children, whether we have borne any ourselves or not, because we feel that we can not face the future for the children of to-day such as the young men of the last decade have gone through.

Mr. NICHOLSON. One of the organizations in the National Council is the Farmers' National Council. We will hear from Mr. Benjamin Marsh a few words, and he will introduce a gentleman from Virginia after that for just a word.

STATEMENT OF MR. BENJAMIN MARSH, MANAGING DIRECTOR OF THE FARMERS' NATIONAL COUNCIL.

Mr. MARSH. Mr. Chairman and gentlemen of the committee, I will be very brief.

As managing director of the Farmers' National Council since last July I have been out on the Pacific coast twice, and I have been to the Atlantic coast, and I am just back from a trip to the Middle West, Minnesota, Wisconsin, South Dakota, Nebraska, Iowa, and other States this side.

My own opinion on this subject is of no value to you, but I have had an opportunity for the last few months to talk with literally hundreds and probably thousands of farmers, as well as to address some very large labor meetings and to talk with labor leaders.

Perhaps the condition of the farmers is best illustrated when I tell you that while taxes averaged, Federal, State, and local, about—or let me put it this way: Government expenditures averaged about \$442 per family—the farmers did not get a net of \$100 per family last year. Of course some of them had their food and sort of shelter, etc., but they are broke.

And, gentlemen, they took the purposes for which we entered the war seriously. The profiteers did not. They talked a sales tax and large armies and large navies, but these farmers and the 6,000,000 women on the farms, who are doing an awful lot of thinking and will vote accordingly, believe that when we won the war to end war, if we had a semidecent, honest Government, there was no need and there is no need for large armies and large navies.

I could not answer their arguments against this large Army and large Navy. I could not do it if I wanted to. I concur in the judgment of the thousands of farmers and farmers' wives who do not want a large Army and a large Navy.

You may remember that a few weeks ago a Mrs. Norris P. Reddick, a farmer's wife from Minnesota, came down here and asked both Committees of Agriculture, Senate and House, for legislation to prevent the catastrophe which has befallen practically all farmers, with some exceptions, which in the last two years has put them on the road to the poorhouse, with tens of thousands and hundreds of thousands asking for legislation to stabilize farm products. Mrs. Reddick, who has more courage than we men will ever have, reminded the Committee on Agriculture of Kipling's poem that the female of the species is more deadly than the male, and said that 6,000,000 women on the farms are going to fight for their homes and their children.

I do not say all those farmers' wives and all farmers are opposed to such an Army as the gentlemen who are seeking concessions in foreign countries demand, but most of those farmers and their wives are opposed to this large Army and large Navy. They even took seriously the calling of a conference on the limitation of armaments and regret that it developed into a conference to make fighting cheaper for the rich, and they are very seriously opposed to that. They insist that you cut down on the Army and the Navy and cut it way down and do it right away.

Now, I know I am speaking the opinion of literally millions of farmers and farmers' wives in urging that you do not increase the standing Army, because the farmers know and organized labor knows that a large standing Army is not designed to protect us against any foreign enemy, for we will not have any foreign enemy if we are decently honest in our foreign relations and do not let the profiteers in this country, which has about 60 per cent of the world's gold, exploit the poor people. They know that a large standing Army is designed to break up the orderly effort of farmers and laborers to secure economic justice.

I sincerely hope you will keep the Army down to the minimum figures suggested and, if possible, or if you have occasion, that you keep the Navy personnel down at least to the limit that has been requested, and I make this most urgent request on behalf of our farmers and farmers' wives.

I would like to introduce a real farmer. I am a hired man of the farmers, but this man works on a farm. Mr. John J. Duggan, of Ballston, Va., a bona fide farmer, and I call on him to say a few words as to what the farmers of Virginia and elsewhere think on this subject.

STATEMENT OF MR. JOHN J. DUGGAN, BALLSTON, VA.

Mr. DUGGAN. Mr. Chairman and members of the Senate committee, I want to say that the farmer is beginning to think that the interests of this country control our Army and Navy. Everywhere the commerce goes the flag flies after it. The millionaires of this country have exploited our country and now they want to go to foreign countries and want a bigger Army and a bigger Navy. That is the way some farmers look at it.

I have been in the National Guard myself in the State of Pennsylvania. I was a young man and I felt it was a good week's vaca-

tion to go out with the boys and be free. But since I came to man's estate and begin to think, I find our Army has not enough educational purpose for the youth. After they are trained they ought to have an hour or two of school. Then I would be for a large army. But the way the matter stands at the present time I am for a small Army, because I feel that the Army is held over the heads of the workingmen to stop them from thinking and to stop him from acting as his conscience dictates.

We, the farmers of to-day, and workmen feel that the luxuries of the past are the necessities of the future. We have good schools in the country, and we give our children a good education: but after giving them an education under the present system there is a string on them—you can not have this and you can not have that. Now, conditions of this kind will have to be eliminated. The rich are getting richer and the poor are getting poorer. It takes a farming man 10 or 12 years of hard scratching and denying his family the real necessities of life, oftentimes, to acquire a farm: and those that make good on the farm, once they have it, have to keep at work as hard as ever, and oftentimes their children have to leave school because they can not afford to hire help. We feel that if the immense appropriations were taken from the Army and Navy and put on roads we would feel a little better if it would help the States establish roads. All the appropriations, I understand, for the nationalization of our roads, and the cooperation of the Federal Government, have been cut and added to other things that are not as essential for life. People are beginning to think to-day for themselves and for their future children and for their son's children, and they feel that if the Congress of the United States cuts down the appropriations for the Army and Navy of the United States there is no country in Europe that can do this country any harm. They can not very well get anything to start a war, so why should we fear them? Why do we fear them? Why do we want a large army? Is it because the workmen are trying to get together and get American conditions of living? Why, sure, that is what it is for. That is the way we feel, 90 per cent of us.

Now, I never felt that way when I was a young man. I thought the workman ought to belong to the National Guard and protect his home. Now, Mr. Chairman, the majority of the people did not feel that way. I know that I was looked down upon as a young man because I always did, and I had a few arguments and fights over it. I was foolish enough to fight.

I was born in the anthracite division of Pennsylvania. I can remember that when a few troops came into that section the people quieted right down: but the minute the State militia came there they felt that they had a little grudge against them, and they would do things that they should not have done, and these men would do things that they ought not to have done. If they saw men congregated in any place, they would shove them aside and make them move, some of the men would naturally fight, they would resent it, and they would get put in the guardhouse. I think personally, myself—I have had some thirty-odd years' experience looking at things, and I have never had the opportunity to appear before a committee of Congress before—I think that the time has come when

the Americans at home are going to be heard from. They are getting educated to the fact that they are not getting justice. Everything that we buy costs five times what it costs to produce, very nearly. Prior to the war things were sold in foreign countries cheaper than they were sold here. We are fattening our manufacturers and our bankers, and they are full fed, to the detriment of the working men and the farmers of the country.

Now, the time has come to change. The farmer wants justice. I, for one, think that every man in industry ought to earn interest on what he has his money in, but I do not believe in this condition. The interests in this country want the earth for a playground and the ocean for a bathtub, and they have them. Now, I contend that the sober, thoughtful men in this Congress that do a little thinking for the future should have a revision of the corporation acts, and make every corporation pay according to its actual taking, whatever it has got invested. Then, if you had a big inheritance tax, that would relieve things. That is my own opinion; it is not the opinion of all the farmers. Or, if you would fix the rich man so that he could not leave one child over \$500,000, then we would have a good country and have millions and billions of dollars reduced without any industrial shock. If we are going to continue in the present system, there is something going to happen. We can not tell what it is. I believe that the Congressmen and the United States Senators must understand the question. When they get among the people they learn a whole lot. I have a cousin who is a great orator. He makes some great orations. He says "I ain't afraid of socialists." The other day I told him he ought to get around and feel the pulse of the people; to go and get a second-hand suit of clothes, and get out and work with the people in the factories and on the farms, and then he would know the people. But you get among the people in the towns, and they have all got jobs of \$2,000 and \$2,500 a year up to \$15,000 or \$20,000 a year, and naturally they look at life differently from those that work with their hands. The farmer to-day, to live, has to buy machinery, and that makes it cost him so much to live. I need a thousand dollars' worth of machinery, and I can not buy it. I have needed it for the last five years. When we have all these corporations here that are built up of excess profits, and do not take it away from them, it is altogether wrong. I look to this committee to reduce the armament of the Army and the Navy; but as for aviation I think that ought to be excepted, because that is for educational purposes, and for the uplift of the country, and it is going to be the future form of our fighting force. Thank you, gentlemen.

Mr. NICHOLSON. I would like in a few words very briefly to interpret, if I can, the spirit of the council with reference to this question.

I might have said, and did intend to say, that there are many other organizations in our council—the National Educational Association, the League of Women Voters, the W. C. T. U., and other organizations which are not represented here—that were not asked because of the shortness of time.

I think it may be taken for granted, Mr. Chairman and Senators, that everybody believes in national security. I do not think there is any question about that. I do not think there is any patriotic citizen who wants our country endangered or wants it to go to pieces or

wants it to be put in jeopardy. But of course there is a difference of opinion among organizations and among the people as to the point of what constitutes national security, and just at that point the great masses of the American people naturally divide into two camps: largely due, I think, to their habits and methods of thinking. There are people who think and have been taught to think and have grown up that way in terms of war; and every question of international relationship resolves itself, in their thinking, in some particular or other, in the last analysis, into a question of war. That is, there may be war, and therefore we must provide for it adequately by the machinery of Government.

There is a large class of other people who are equally patriotic, I am glad to believe, who think in terms of peace, who try to think carefully, who are thinking all the while in terms of better international understandings, trying to work toward the point of better national understanding, thinking in terms of peace, and they naturally stand for a lesser armament and equipment, both as applied to the Army and as applied to the Navy.

I think this resolves itself fully, as I see it, as a practical question, into a question as to how many men we need, and that raises the question in our minds as to whether or not we need to be providing now for an Army and for a Navy for the national security and protection as against outside interests, or whether we simply need a National Army as a police force to safeguard our own interests and to keep peace and order among our own people and in such portions of the world as we have jurisdiction over, and we have come to feel, especially in the light of the recent world's conference, and inasmuch as we are three and one-half years now from the great World War, and we see that almost every other country in the world is bankrupt, if I may use that term, except the United States—that the dangers of war are so remote that the National Government is not justified in continuing to provide for an armed equipment beyond the need of an adequate police force, or at least, putting it in another way, that the National Government is only justified in considering such progressive disarmament toward such ultimate police force as will safeguard the interests of the country.

I am sure that no one would agree, or even claim, that there is any danger of war with Great Britain. I have sat in the gallery and heard many of the debates on the four-power treaty, and I believe that the people of the country readily understand that the four-power treaty and other work that was done at the Disarmament Conference has practically removed, at least for a long time, any danger that there was, if there was danger, of a conflict with Japan. There are men living in Japan that I know personally that occupy a very high position there, among them Americans, who say that there is a growing peace party in Japan that is getting to be so strong—that is, a party that stands against the militarism that has been manifested in Japan in the past—that it will take occasion undoubtedly to come into control of the Government if the militaristic tendency in Japan should continue for any length of time.

Possibly the claim will be made now that the recent treaty between Russia and Germany may endanger the United States; but I think if you will think for a moment of the child feeding on such

a large scale, that is going on in Germany, and the child feeding that is going on on such a large scale elsewhere, and especially in the last few months, you will realize that the danger of any threat, if there was any threat there, has been removed for many, many years to come, so far as any danger for the United States is concerned.

So that we take this position, to put it just in a word, that we think there is no more need for a superfluous soldier—and I say that with the utmost respect—no more need for a superfluous soldier than there is for a superfluous clerk; and certainly Congress is not ready to vote money for the maintenance of a system that is not actually needed.

I want to express the thanks of our council, Mr. Chairman and Senators, for the time that you have given us upon this question.

Senator WADSWORTH. The committee will now hear from the Women's International League.

STATEMENT OF MRS. GEORGE TALBOT ODELL.

Mrs. ODELL. Mr. Chairman and members of the committee, the Women's International League is going to ask you gentlemen to do only what it is asking in 21 other countries. We are organized well in 21 countries, and we have members in 31 countries. We are growing fast. We have been in existence for six years and have had three international conferences, one at The Hague, one at Zurich, and one last summer in Vienna, to which women came from all over the world to work for an understanding between nations, for world disarmament, and for peace. To-day we have one of our representatives here from Chicago. She has come here to speak to you. She is a member of the board of directors of the League of Women Voters of Illinois. She is one of the board of trustees of the Chicago Church Federation.

STATEMENT OF MRS. GEORGE M. MATHES.

Mrs. MATHES. I think I can say nothing except to repeat what has been said by other speakers. There is just one point that comes to my mind in regard to this matter, and that is the representation of the people by the members of the United States Senate. I take it that the men here in this committee desire above all things to properly represent the consensus of opinion and the desires and the welfare of the people of the United States, and I want to speak a word in regard to the interpretation of the opinion of the people whom we represent.

It is commonly thought that the newspapers represent public opinion. I think that we know now that the newspapers do not represent public opinion; and that not only do the newspapers not represent public opinion but they do not influence public opinion. We have had occasion to see that tested continually in Chicago. Therefore I would like to warn you, if I may be so presumptuous, not to depend upon newspapers for your interpretation of public opinion.

A little incident occurred during the present year where a committee on the submarine, as we discovered afterwards, had gathered

their inference as to public opinion from newspaper clippings; and as soon as they announced their conclusion, based on newspaper clippings, and it was telegraphed over the United States to the women's organizations that such had been done, letters began to pour in which convinced that committee that they had wrongly considered the meaning of public opinion by going to the newspapers for it.

Another thing occurs to me, and that is the method of arriving at conclusions by expert testimony. Expert testimony on military affairs is prejudiced testimony. Testimony by Army and Navy officers is prejudiced testimony. Testimony from the War Department is prejudiced testimony. And, therefore, because testimony from all these sources, which naturally you would turn to to get the facts, is prejudiced, in the nature of things I wish to urge you gentlemen that you discount the testimony from those sources and turn, rather, to the testimony of the opinion of the rank and file of people who have to pay the taxes that will have to be levied for an increase in the Army, who will have to go to the polls and cast their votes. I believe that the Republican Party promised a reduction of taxation. The people are looking for the redemption of that promise. The people of the country believed—they really did believe from the first to the last—that our last war was fought as a war to end war. They believed at the time what they were told in the newspapers and by orators. They have now learned better.

They also had faith when Mr. Borah introduced his resolution in the Senate; and they were eager for anything that would tend to bring about an international understanding and remove the menace of warfare. Therefore, by and large, the people of this country, the lowly people, the organized and the unorganized, men and women, were enthusiastic in the support of the Members of the Senate in ratifying the action of the conference, and I think the majority of them agree with these treaties. As much as they did fear some parts of them, they were willing to do anything or allow anything to be done that would assure future peace; and we have been assured that these treaties do insure it; and I repeat again what was said before, that Mr. Hoover declared that the four-power treaty removes the danger of warfare for generations from our country. If that is true, in the position that has been pictured to you to-day, with the large armies of unemployed men walking our streets, with the burden of taxation so heavy that our ordinary people can not buy homes and can hardly rent homes, when families that have never had to live before with boarders and roomers now find it necessary, creating conditions that the social workers know break down the home, Congress intends to increase the burden of taxation, while I understand the Secretary of War realizes that an increase is not needed, and we are going to enlarge our Army far beyond what we had before the war, I do not see how it can be justified in November to the public.

I think one reason that the ladies asked me to come here is because I am in the business of speaking to large groups of people of various sorts throughout the State of Illinois, and through the summer we went out to try to give the facts to the public regarding the situation and the need for this peace conference, or this arms conference, that was called afterwards. We addressed ourselves to the State

groups and the club groups and groups of unorganized women and fraternal women. and I found not one dissenting note. I found agreement between them in favor of reduction of the Army and Navy, and particularly eager for security from future burdens of taxation.

Now, one more point I will refer to, and then I am done. Hitherto the common people of the United States—and by that I mean the rank and file of us—have left the business that comes to our Representatives to them. We have elected our Representatives to Congress, to the House and the Senate, and then we have gone off and left them alone. We do not do that any more. We are now in the business of following up what is being done in Congress day by day and what is being done in the Senate day by day. Although we know that the Congressional Record is not always an exact representation of what goes on, I venture to say that you have never had so many calls for the Congressional Record as you have had in the last few months. We are thinking, all of us, in every kind of women's club. Women that never thought about foreign affairs before are doing so now. They are having committees on international friendship and international relations, and things of that sort, in order to study the facts; and they do not get their facts from the newspapers. I want you to remember that, and they are not getting their facts from what they read in the speeches in Congress, but they are going to the primary sources of information, and in their meetings they are speaking on both sides of questions, and they are becoming intelligent voters. The women of this country are becoming intelligent voters. They are not content with having the right to vote, but they are regarding the franchise as a great duty, and they are regarding the men who are elected to Congress and to the Senate, as well as the men who are appointed to these executive offices, as men whose duty it is to serve the public.

Mrs. ODELL. Our next speaker, Miss Mary Winsor, comes from Philadelphia. Philadelphia, as you know, has many Quakers in its population. All through Pennsylvania we have a very strong organization. I am glad to say that they are not only strong but are intelligent and are leaders, and they think and they do believe that an army makes for war, not for peace.

STATEMENT OF MISS MARY WINSOR, OF HAVERFORD, PA.

Miss WINSOR. Mr. Chairman, I am very glad that I have had the good fortune to come immediately after Mrs. Mathes, because she ended her very able speech on the note that I want to take up. Having worked for 12 years for the franchise, some of us take it very seriously, and I want to tell you a little about what is in all our thoughts, and that is the coming election, and what the woman voter is prepared to give to the different political parties.

Before I take up that point I want to say this: One of the speakers referred to the recent treaty between Germany and Russia as something that might menace the United States. It does not menace the United States, but it shows us the way on which we should go.

I felt mortified as an American citizen when I was in Austria with the Women's International League at the great biennial congress

last summer, and when I went to Germany, at the invitation of the German women in October, to attend three great peace conferences in Germany, peace conferences of such importance that the members of the Reichstag and different professional bodies, the most prominent men and most influential men of the country, spoke there. I spoke at the banquet at which these great persons spoke, and I could only blush when I admitted the increase in our appropriations that had been made last spring for war purposes. I said to those German men and women, "We women have just got the vote; and you just wait, and we are going to teach our representatives and our business men to listen as to how we want the money of the United States spent. Men in the past have taken the children's bread and have thrown it to the dogs of war; but we are going to do differently, I hope." And I can not bring home to anyone who was not in Germany and did not mix with the people there, the interest in peace that is felt in that country. There is a very strong peace movement there that is backed up by very influential men and women.

The great obstacle to the development of the peace movement in Germany is the impossibility of fulfilling the reparation terms. By those brutal and unreasonable terms we have made the task of the German pacifists more difficult, and we have encouraged the militarists, and every dollar we spend on the Army and Navy here makes the peace movement all over the world more difficult. We should return to the ideals that we had before the war when America was unarmed and unafraid.

I have no brief to speak for the women of this country; but, gentlemen, I want to remind you, speaking only from a base-material standpoint, that in war there is nothing in it for us. Men get the glory and they make the huge fortunes. It is the women and the working people who suffer. There is nothing in it for us, and we are not for it, generally speaking.

Now, there are three points of view in regard to war. There are those who think that war is necessary and urge the country to prepare for it. With that point of view we have no sympathy whatever.

Then there are those who dislike war but who think that the way to avoid war is to prepare for war. That we consider quite an exploded theory. The experience of Europe has disproved it. I think I can only repeat what some of the other speakers have said—that the last war showed that war brought none of the things that were specifically promised. It does not seem to have ended war, or why should we be preparing?

It has not made the world safe for democracy, as President Wilson said it would. We know it has not. We know that democracy is not safe here. In Europe they have freedom of speech far more than we have in America. It has made the world very dangerous for democracy, especially here. When President Wilson said that there was a greater destiny reserved for this country, a more glorious destiny, and that we were too proud to fight, some of us believed that he really meant that. You do not realize how literal-minded women are. We take those things literally. When you say those things we believe them. That went very far toward discrediting the Democratic Party.

Now let us turn to the Republican Party. I come from a Republican State. I wish to pay my respects to the Republicans.

President Harding said on September 4, 1920:

If I catch the conscience of America, we will lead the world to outlaw war.

That is being taken up by a very powerful league of women voters in their convention at Baltimore.

In his keynote address on November 12, 1921, his disarmament-conference address, President Harding said:

Contemplating the measureless cost of war and the continuing burden of armament, all thoughtful peoples wish for real limitations of armament and would like war outlawed.

Now, if you want to know how some of us felt about the Conference for the Limitation of Armament, to us the disarmament conference looked like an international rummage sale. You ransacked the garrets of the Nation and found some worthless old junk in the shape of battleships that were useless some 15 or 20 years ago and scrapped them. We do not consider that limitation of armament. We consider that it might, indeed, mean that the Nation was free to devote themselves to the real business of the world; that it was much more effective to kill off people by poison gases and disease germs than by these antiquated battleships, and that was the chief reason they were scrapped.

In last Sunday's Ledger, of Philadelphia, right in the article from which I just read you from President Harding's speech, on the front page we see that after the House of Representatives had cut down the Navy the administration, with Mr. Harding using his influence, Secretary Hughes and Mr. Denby applying the party whip and spur, they increased then the personnel of the Navy so that it will cost us what is variously estimated at from \$47,000,000 to \$60,000,000 more. We do not call that a real limitation of armament. Women are terribly literal minded about such things. That, I believe, goes far to discredit the Republican Party. Now, in this country the Republicans have run things until the people got sick of the Republicans, and they have been followed by the Democrats until they got sick of the Democrats, and then they have elected Republicans again. That is the way our politics has been run. There is no reason why it should continue indefinitely. There are other forces coming up in the world. Only those who have been in Europe or are familiar with European conditions know how strong the socialists and communists, the labor element, are: not among the outcasts, among the discredited members of society, but in the government itself; that there are members of the French Parliament, members of the German Parliament, among them. The Labor Socialist Party is tremendously powerful in England. There is an undercurrent here: we all realize that. I am very much in touch with working people, and I know it. Those parties have a program that they think will definitely end war for all time.

Now, this country existed before the Republican and Democratic Parties were thought of, and it will continue to exist after they have been swept into the discard, and I say this, gentlemen, for your own well being, that you can hasten the removal of both parties from the country, or you can retard it and perpetuate your own existence, in accordance with what you give the people, with what you promise the people and what you really give the people, especially on these

great questions, the questions that are partly religious and partly ethical and partly economic; and in that the question of peace and war and international good will stands first and foremost.

Mrs. ODELL. I think we have only one more speaker. Our last speaker is from Washington, a member of our executive board. She is a student, always at work studying figures, getting facts, and I am sure you will find her facts absolutely correct. She is a contributor to magazines and was formerly a newspaper woman. I am very glad to introduce Mrs. Harriet Connor Brown.

STATEMENT OF MRS. HARRIET CONNOR BROWN.

Mrs. BROWN. Mr. Chairman and gentlemen of the committee, as the last speaker, I want to make it perfectly clear that we women in coming here desire to ask that you return to the prewar basis for the Army or make it very clear to us—the burden of proof seems to me to lie with you—why we should not go back to the old Army standard as it was before the war.

The House bill provides for 11,000 officers and 115,000 men, and we think that is too much. I think we see very clearly why it is. General Harbord, according to the newspapers, was before this committee last Saturday and said something that interested me immensely. He said:

It is the work outside of the actual Army functions that requires the extra personnel.

That is very interesting, I think, because I have felt and contended for a long time that it was not the huge expense of the Army that was the worst feature of it, but the fact that we have been spending approximately about three and a half billion dollars out of four billions of appropriations every year for war and that out of that immense sum of money we had only something like \$500,000,000 left to spend for the purposes of agriculture and commerce and education and public welfare and the things that mean so much to us women. nor was it the fact that we were building up in this country a caste system that was the worst menace of militarism, but the fact that were were encroaching on the civil functions of Government through our military organization, and that the Army was doing all sorts of things that the civilian departments ought to do.

The adherents of the Army are using that fact as an argument for large appropriations. They are telling us what good roads the Army builds and what wonderful maps it makes and what wonderful things it does for the health of the country. But all those things could be done and should be done by the Department of Agriculture, for instance, which should make the roads, or by the Geological Survey, which should make the maps, or the Public Health Service, which should take care of the public health, and not the Army, as we see it.

The objections, it seems to me, are perfectly clear—at least, there are two objections that are perfectly clear to my mind, to the militarization of our civil functions. One is that it costs a great deal more for an Army officer to do a definite piece of work than it does for a civilian officer, if you consider the difference between the salaries and the pensions of those two different sets of people. It is perfectly apparent that it costs more to have a bridge built by an

Army engineer, whose salary is twice that of a civil engineer in a civil branch of the Government, and whose pension is from \$3,000 to \$6,000 a year, as against \$720 a year. It is more expensive to have the Army do those things. And what is more important, it is certainly against the spirit of our institutions. It was for that very reason that we went to Europe and entered into this war, was it not, to break down the German system of militarism? And now we certainly stultify ourselves when we build up a system of government in this country based on militarism. And when you stop to think of it, and realize that the American people were willing to spend thirty-three and a half billions of dollars in breaking down such a system, and were willing to put 4,000,000 boys under conscription, I think that you ought to feel pretty sure that the people are back of you before you ask for a change of the whole system of government.

Now, if that is the only reason General Harbord wants 11,000 officers in the Army, I do not think it is a good reason. I have seen people who have been around Washington for about 20 years, as I have, and know something about what is going on in the departments, and know very well that there are a good many captains and majors right in this city who are doing nothing more than messenger work; and if you gentlemen do not know it, I suggest that you take the pains to investigate and find out. And it is not right, with the unemployment there is in the country, 5,000,000 of people out of work, and with the general unrest, that that sort of a privileged class should be maintained for doing things that the civil officers of the Government can do.

We want to ask definitely that you go back to 5,000 officers instead of 11,000, and we want to ask you that you cut down that House provision of 115,000 men to approximately 80,000, which is enough now, if it was enough before the war.

And I want to say that we have not the least bit of enthusiasm for your citizen army; that we think that you have circumvented us women. We felt very hostile to the idea of conscription or universal military training, and you realized that we did feel hostile to it, but you have accomplished what is practically conscription under your Army reorganization act.

We are going to look into the federalization of the militia, too, the more so because the question has been raised. It was raised in the minority report at the time of the presentation of the Army reorganization act of the constitutionality of that provision.

Then we are dead against that item of \$500,000 for chemical warfare. In fact, I do not see how any Member of the Senate can defend that item, any Member of the Senate who voted for that treaty which condemned asphyxiating gases.

Senator WADSWORTH. Do you know what that money is going to be used for?

Mrs. BROWN. I suppose that it is for research.

Senator WADSWORTH. It is to be used largely for defensive purposes, for the making of gas masks which will protect our men.

Mrs. BROWN. But the understanding is that the enemy, all the other nations of the world, will proceed on the same theory, will they not?

Senator WADSWORTH. Now, let us be sensible about that. There are many nations that are not parties to that treaty.

Mrs. BROWN. Well—

Senator WADSWORTH (interposing). Would you appear before a committee of Congress and denounce an appropriation which would make it possible to supply our men with defensive masks?

Mrs. BROWN. I do not believe we are going at it in the right way. Senator Wadsworth, when we say we can not do anything until everybody else does—anything that is in a positive direction toward amelioration of these terrible world conditions until everybody else agrees to be just as good as we are. I am willing, myself, and many people feel the same way, to take a slight risk.

Senator WADSWORTH. You will take a chance?

Mrs. BROWN. Yes. And it seems to me the part of wisdom to do it. It seems to me that we stultify ourselves, and make that treaty “a scrap of paper” and little else. We have signed that treaty with the nations—the only nations, practically—that we fear, have we not?

Senator WADSWORTH. I am not talking to-day.

Mrs. BROWN. If it meant anything, what does it mean? Was it just an idle gesture, a piece of rhetoric? I do not see how Senator Lodge and Senator Underwood who helped to negotiate that treaty can possibly vote for the item of chemical warfare in this bill. I do not see but that you other gentlemen are just as responsible, you Senators who ratified it. I can forgive the Members of the House for putting in that item because they were not parties to that treaty; but the Senate was. You might—you could afford to—be generous. It would make an awfully good talking point for you.

Now, what do you want that big Army for? That is the thing. Suppose we are all wrong about this, and you are right. You ought to tell us more. What is it all about? The burden of proof is on you people to show why we should have that big Army. Is it for a foreign foe? That has been discussed pretty fully. We have just finished a successful war, and the Europeans are wondering about this Army of ours. They have the question of disarmament up at Genoa to-day, and they are looking, I think, with a good deal of terror toward us when they see what we are doing in the way of armament. We are the only people that have much power now. Why should we, of all people, proceed to arm ourselves? And our only possible foes—at least the ones we talked of having trouble with—Japan and England, we have just made a treaty with for 10 years; and the people on the other side of the line, that are not included in that treaty—are we perhaps going to have war with them? We are not bound by the terms of that treaty to help our allies make war. Certainly, the President, in urging the voting for the treaty, assured us that it was not an appeal to armed force. He said, “It is no commitment to arms.” So that, to be consistent, if we are not going to appeal to armed force, we do not need an armament.

I suppose that we women are a little childish. We reason literally.

Then, for border purposes. I saw something in the paper one day about this Army being needed for border purposes. Are we now, after living in peace with our neighbors for 150 years, to begin to fortify the Mexican and the Canadian borders?

I lived in old Mexico for a few years, and I have sympathy for those people down there, and I certainly shall be hot on the trail of

Congress if it declares war—I mean, in my simple way—with Mexico. I think the Mexicans need something else than an army sent against them.

Are we going to develop on this continent a new policy; and do we need an Army to look after Latin America? Is that the idea? Do we need to put our Army into South America?

Or is it for the suppression of our industrial population when they show unrest? I took the trouble to look through the reports of the Secretary of War for the last few years, and I see by the reports of 1920 and 1921 that within 20 months the Army was called out 30 times for nonmilitary uses; I mean by that that they were not put to the ordinary functions of an Army, but were used to suppress strikes in mill towns, and in mining centers, and to act in race riots. One of those occasions was a race riot in Washington, which it certainly seemed to us who live here was caused more by the soldiers than by the colored people.

A point I want to make clear, which seems strong in my mind, is that you gentlemen have had no mandate from the people for the program that apparently you have in mind. Certainly the mandate from the people has seemed to come from the other direction, to stress the desire of the people for peace.

In 1916, certainly, President Wilson was reelected on the slogan, "He kept us out of war."

In 1918, at the end of a victorious war, the Democrats were defeated overwhelmingly in the congressional elections. I never have been able to find out, to my own satisfaction, why that happened, unless it was that the people were discontented with having been drawn into the war.

In 1920, we all know that there was an overwhelming defeat for the Democrats—or an overwhelming victory for the Republicans, whichever way you choose to look at it. I have no doubt but that the kernel of that vote was political, but I am perfectly certain that, wrapped around that kernel, was layer after layer of moral indignation because of the war conditions, and because of the failure of the peace program, and because of the bitter disappointment of the people generally that, after all their sacrifices, nothing had come of it.

The people do not get a chance to express themselves often, but in 1916, 1918, and 1920 it seems to me that they made their sentiments perfectly clear.

And then, in 1921, there was certainly an irresistible demand for this disarmament conference. A couple of friends of mine who were Members of the House of Representatives told me that there was no idea of calling that conference until the demand came in from the people, but that the spontaneous expression from the people could not be disregarded.

Then in 1922, just recently, you gentlemen have been urged to ratify these treaties, and the reason, I am sure you do not doubt, the reason advanced by them—whether they are right in their reasoning or not, that is what they think about it—was that the chance for war with Japan and with England is lessened by these treaties. It is perfectly clear, it seems to me, what the people want; but we people who have been around Washington for a number of years know that

sometimes Congress knows what the people want and refuses it, or side-steps it, or manipulates the situation in some way or another. We women have come to you to-day to say to you in a friendly mood that it is important that you should not misunderstand the temper of the people in this respect, and that you should not disappoint them.

I am continually amazed that the memories of politicians are so short. I think again and again of things that I have seen here that it seemed to me were warnings, which politicians have disregarded. The Payne-Aldrich tariff bill was one thing that I watched in its passage through Congress when the handwriting was so plain on the wall; but the Republicans could not see it. Man after man went down; even Mr. Tawney, who had been here 18 years; because the people had said unmistakably that the tariff must be reduced, but hundreds of schedules were increased instead of reduced. The people, as soon as Congress had passed that act, spoke unmistakably; and they will do so again. If they do not in the next election, in 1922, they will the next time or the next; because, in addition to the usual factors, there are new ones to reckon with.

Women count now. They have not had a chance to express themselves so far, politically. But they have learned so much in the last year! If you gentlemen had been close to some of the women's organization, as we women have, you would realize how fast they have been learning and how zealously they have taken hold of these political questions; you would realize that they have a feeling that you gentlemen of the Committee on Military Affairs need watching a little bit, because this is the way they look at it. In 1917—

Senator LENROOT. We are not all members of the Committee on Military Affairs who are here.

Mrs. BROWN. Are you not?

Senator LENROOT. Only these three gentlemen.

Senator SPENCER. I am.

Mrs. BROWN. I have something in mind that I want to say, and if the shoe fits anybody he can wear it. In 1917 this country went to war to crush militarism and to end war. Well, we were successful. We came home in 1918 with Germany crushed. We confiscated her guns and side arms and helped to sink or sell her ships; and we took possession of her and the victory was complete. But what did we do when we got back home? The Committee on Military Affairs went to work to build up a military machine that was worse than Germany had ever thought of having.

That Army reorganization act we women are going to repeal. I will tell you now, you may just as well make up your minds to it: that is going to be repealed. We have set our minds on that. We do not like it, and we do not think it is fair, because the people have not had a chance to express their minds on it. We women were looking the other way. We had no votes at that time. We had our fight on for enfranchisement while you were working at that act. But I think you knew a little bit about what was going on in our minds, because I have read the majority report which Senator Wadsworth made—or his name is on it—and the minority report of Senator Sheppard and Senator McKellar, and I know you had quite a good deal to say about the provision for compulsory military training. Somehow that provision dropped out of the bill at the last, and it was current comment

here in Washington that it was dropped because the women of the country generally were understood to be against it, and the women were to vote in large numbers for the first time in the elections of 1920 that fall. Well, it was not safe for you to take that risk, so that provision for compulsory military training came out of your Army reorganization act. But very soon afterwards Mr. Kahn, for one, the chairman of the Committee on Military Affairs of the House, was back here and said quite openly—gave out an interview to the papers—that he was going to do his best to attach an amendment to the bill providing for what he called “automatic, peace-time conscription.”

Then we women got busy and worked hard. But you men circumvented us. So far as I can see, a boy has a chance to stay out of the Army in the beginning, but once he enlists in the Organized Reserves or the National Guard he is a conscript in case of a “national emergency”; and, furthermore, you have a clause in that act which provides that he is gagged. Everybody “subject to military law” is subject to court-martial if he speaks disrespectfully of a Member of Congress. Just think of it! I was in Germany when I was a girl—

Senator WADSWORTH (interposing). Is that in the Army reorganization act that you are speaking of?

Mrs. BROWN. That is there. Any soldier that speaks disrespectfully of the President or Vice President or any Member of Congress, or a Senator, or the governors of the Territories, and a lot of other officials. I think that is perfectly awful. As a girl, years ago, I wrote to the New York Sun about the horrible muzzle law in Germany—

Senator SUTHERLAND (interposing). Are you sure of that?

Mrs. BROWN. I have the act here. [Producing pamphlet.] I should think you would know better than I, so that perhaps I am wrong; but is not that the act of June 4, 1920 [indicating]?

Senator WADSWORTH. You are speaking of the Articles of War. Those are the Articles of War.

Mrs. BROWN. I do not know what it is. What is that [indicating]?

Senator WADSWORTH. You have there the Articles of War. They are not a part of the Army reorganization act, and have nothing to do with it. They happen to be bound up together in the same cover there, but the Articles of War are an entirely different thing.

Mrs. BROWN. Both are effective, and their combined authority make the whole youth of the Nation unable to express themselves.

Well, now, there is just one more point I want to make. As I take it you gentlemen when you make these big appropriations are following the advice of the military experts. I wonder if you would think it would be stretching a point if I said that we women are experts? Now, you have your choice between the military expert, who is an expert in the culture of destruction, and we women, who are experts in the culture of life. Of course, we can not control you. You can take your choice. But the experts have not very many votes to give you, and we have approximately half of the electorate.

I think that is enough, possibly. There are many more things I could say. I would like to submit as a part of my testimony some resolutions that I drew up before the last election, which were pre-

sented to the College Women's Club of Washington. They are interesting in this way, that they contain the figures that were so appalling then as to our expenditures for war, and I have put in brackets the figures as they are now, for the fiscal year ending June 30, 1922, because I think the conclusion to be drawn by the American voters about our expenditures for war purposes is just as strong now as it was then. These resolutions show that while we spend now—in 1922—83 per cent instead of 88 per cent, as in 1921, for war purposes, there is a larger proportion of the total amount actually going for the Army and Navy, and that is not right. That is contrary to the general opinion. It was 20.5 per cent two years ago, and it is 26.4 per cent now, and most people think you have been doing something to reduce the proportion of our national funds expended on the Army and Navy. I want to put that in the record.

(The paper referred to is here printed in the record, as follows:)

A short time before the elections of 1920, the following resolutions containing figures in regard to Federal appropriations for the year ending June 30, 1921, were presented to the College Women's Club of Washington, D. C., by Harriet Connor Brown.

It is interesting, as the elections of 1922 approach, to consider these resolutions corrected by the figures for the fiscal year ending June 30, 1922.

It will be seen that there has been a slight reduction in expenditure for wars. It amounts to only 4.8 per cent. Instead of 88.4 per cent of the total present appropriation being appropriated on account of wars, as was the case for the year 1921, 83.6 per cent is appropriated for the year ending June 30, 1922.

Unfortunately, the whole of that slight reduction is entirely due to the natural decline of expense for past wars (due to the death of pensioners as time goes on) and in no degree to a lessened burden for "preparedness." The amount of appropriations for future wars, that is for our present "national defense," has (contrary to the general opinion) actually been increased from 20.5 per cent to 26.4 per cent of our total appropriations.

More even than in 1920, therefore, is it the duty of women who desire as voters to promote economy in Government administration and peaceful relations with the rest of the world to seek to elect to Congress only persons pledged to drastic reduction of the amounts appropriated for the maintenance of the military and naval establishments.

RESOLUTIONS PRESENTED TO THE COLLEGE WOMEN'S CLUB, WASHINGTON, D. C.

Whereas the amount appropriated by the last Congress for the maintenance of the Government for the current year of 1920-21 (exclusive of the Postal Service, which is almost self-supporting, and exclusive of deficiency appropriations for 1920) reached the enormous total of \$4,175,820,089 (1922, \$3,535,050,485); and

Whereas only 11.6 per cent of this huge appropriation, or \$481,744,726 (1922, only 16.4 per cent of this huge appropriation of \$3,535,050,485) was appropriated for the development of commerce, agriculture, public works, public health, science, research, education, and other purposes which interest women generally and college women especially; and

Whereas the remaining 88.4 per cent of the total appropriation, or \$3,694,075,363 (1922, 83.6 per cent of the total appropriation, or \$2,474,450,939) was appropriated for the payment of obligations incurred on account of wars, those past and those to come; and

Whereas 67.9 per cent, or \$2,838,118,400, of that 88.4 per cent (1922, 57.2 per cent, or \$1,601,406,485, of that 83.6) appropriated for wars was for the payment of obligations incurred on account of past wars, chiefly the recent war with Germany, and must, of course, as debts of honor be paid; and

Whereas 20.5 per cent, or \$855,956,903, of that 88.4 per cent (1922, 26.4 per cent, or \$783,044,454, of that 83.6 per cent) appropriated for wars was appropriated for the maintenance of greatly increased military and naval establishments, a sum equal to the entire expenses of the Government in 1916 outside of the Postal Service; and

Whereas the thoughtful women of the United States are desirous of using their new political powers to carry on work for the development of humanity and the improvement of society, work that can not be adequately done without large appropriations from the Government; and

Whereas the present burdens of the taxpayers should be decreased and not increased; and

Whereas the amount that can be saved even by the most efficient reorganization of Government departments and elimination of duplicate activities in the Government offices is trifling in comparison with the total amounts appropriated, an amount not sufficient to make any appreciable difference in the tax bill of the individual; and

Whereas the United States, after conducting a war to end wars, is now at peace with the world, so that to make provision for future wars by increasing its armaments is to stultify itself in the eyes of those who trusted in the integrity of its war aims: Therefore be it

Resolved by the members of the College Women's Club of Washington, D. C., That it is their duty and the duty of all women in the United States who desire as voters to promote economy in Government administration and peaceful relations with the rest of the world to seek to elect to Congress persons pledged to drastic reduction of the amounts appropriated for the maintenance of the Military and Naval Establishments, since these amounts are the only ones of the general appropriation that can be honorably and properly reduced, as repudiation of obligations on account of past wars is not to be considered and as the appropriation for civil purposes is already an irreducible minimum amount; and be it further

Resolved, That a copy of these resolutions be submitted to all the leading organizations of women voters throughout the country, to the local papers, and to the leading press associations.

Senator WADSWORTH. Is there anyone else to be heard?

Mrs. ODELL. We have no others. Thank you, Mr. Chairman and gentlemen of the committee. I want to say that the Women's International League would like to have you go back to the pre-war basis of armament, so that we would have an Army no larger than we had before the war; but if you will not do that, we would at least like to have the provisions of the House bill.

There will be a committee in Washington from now on, and I hope that you are going to listen to women as to a lot of laws. You have been very courteous and very nice, and I want to thank you.

(Thereupon, at 5.25 o'clock p. m., the subcommittee adjourned until to-morrow, Wednesday, April 19, 1922, at 10.30 o'clock a. m.)

WAR DEPARTMENT APPROPRIATION BILL, 1923.

WEDNESDAY, APRIL 19, 1922.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS.
Washington, D. C.

The subcommittee met at 10.30 o'clock a. m.

Present: Senators Wadsworth (chairman), Warren, Spencer, Lenroot, and Harris.

Also, Hanford MacNider, national commander American Legion; D. John Markey, chairman of national military affairs committee, American Legion; and John Thomas Taylor, vice chairman, legislative committee, American Legion.

The CHAIRMAN (Senator Wadsworth). Gentlemen, the national commander of the American Legion and members of the military affairs committee are present this morning, and the committee will be glad to hear from them.

STATEMENT OF MR. HANFORD MacNIDER, NATIONAL COMMANDER AMERICAN LEGION.

GENERAL STATEMENT.

Mr. MacNIDER. Senator Wadsworth and members of the committee, the American Legion at its first convention in Minneapolis, armistice day, 1919, when most of its members had not been out of uniform six months, declared as one of this convention's most important acts that we should have a military policy in the future that would prevent a reoccurrence of our deplorable lack of preparedness during the World War, with all the grief that came in its train.

This decision was made by practical men who had experienced all the horrors of modern warfare, and who, while opposed to war in any form, were convinced that a reasonable and adequate preparedness should always be our national policy. The Military Committees of the Senate and House of Representatives began consideration of this subject, and, acting on what represented a national demand and after extensive hearings and deliberations, evolved the Army reorganization act of June 4, 1920, which provided, as everyone should know, our first effective national effort to prepare in times of peace a plan for the mobilizing in times of war of our resources of man power.

The American Legion had a part in framing this important piece of legislation through its national committee on military affairs, and our national convention at Cleveland in 1920 and last year at Kansas City approved this act of Congress and pledged their efforts to the

Nation in helping to secure through this new military policy an economical, harmonious, and efficient national defense. The Legion was intimately interested in this new policy, as one of its fundamental principles was to utilize the splendid citizen-soldier organizations, which had such glorious careers during the war, to form the basis of our future Army of the United States.

Our national committee on military affairs appeared before the Senate and House Committees on Military Affairs and the House Subappropriation Committee on the Army appropriation bill this February and interpreted our organization's position at this time on the subject of national defense. These hearings made it clear that the Legion insisted upon adequate appropriations in order that the development of our Army of the United States might continue upon a sound and efficient basis.

The American Legion is here to-day, however, to protest against the manner in which the House of Representatives passed the Army appropriation bill and believes that the radical reductions made for the maintenance during the coming fiscal year of the three component parts of the Army of the United States (the Regular Establishment, the National Guard, and the Organized Reserves) is the first open step toward undermining our splendid military policy as expressed by Congress in the Army reorganization act of 1920 and approved by the entire country.

The American Legion unqualifiedly backs up the President, the Secretary of War, and General Pershing in their support of necessary appropriations for the National Guard, Organized Reserves, Reserve Officers' Training Corps, and civilian military training camps, as recommended by the War Department, and also supports the position that approximately 150,000 men is the minimum number needed for the Regular Establishment to perform its proper mission in our plan of national defense. With reference to commissioned officers, the American Legion indorses the recommendation of General Pershing that the existing number of approximately 13,000 officers be reduced through discharge, elimination of the least efficient, and retirement; that the number remaining be readjusted in the several grades; and that in the future, through new appointments in the lower grades, the total number be gradually increased so as not to exceed 13,000 by the 1st of July, 1923, which was the number approved by the Budget committee.

The Regular Army in our Nation to-day available for any emergency is about 90,000, of which 25,000 are on our southern border and about 8,000 school troops used for practical demonstration. This means about one mobile soldier to every 1,200 inhabitants, which certainly does not spell militarism, especially when their primary mission, as outlined by General Pershing, is to train the citizen soldiery of our Nation. There are about 32,000 troops used in providing all the personnel for our coast defense, service schools of all types, supply depots, duty with National Guard, Organized Reserves, and Reserve Officers' Training Corps, together with all the necessary Army overhead, while there are about 30,000 in Panama, Hawaii, and the Philippines, exclusive of the Philippine Scouts.

The Legion desires particularly to point out that the decrease in appropriation for the National Guard will seriously handicap its

morale and effectiveness, and especially urges that the first line of our citizen army be provided with the increased appropriations required for its summer field training, as it would be most unfortunate to say to a large number of the National Guard that they can not go to the summer training camp because of lack of appropriations. It must be realized that this period of training is the most attractive in the entire year to the National Guard, and any failure to provide the funds will be most discouraging not only to those who are at present in its ranks but a warning to the potential recruits of the future. The Legion further urges that adequate appropriations for forage, caretakers, and mileage for regular instructors assigned to the respective units, together with the necessary expenses for an appropriate number of officers and men to attend the service schools are of great importance. The increase in these appropriations is most necessary if the guard is expected to derive real benefits from these excellent service schools.

The Legion is also opposed to the provision in the House bill which would require the breaking up of a number of the special units for which the States have provided adequate facilities. It fully recognizes the importance of all the special units and is opposed to any principle that Infantry alone should be our entire defensive force. One of the fundamental principles in connection with the National Guard should be the building up completely in all arms of the 18 National Guard divisions.

The American Legion is disappointed that the House appropriation for the Officers' Reserve Corps has been limited to such an extent as to discourage this splendid component of our Army. It is useless to expect the officers of the Reserve Corps to continue their active interest if provision is not made for their training at least once every three years, which was the purpose of the appropriation approved by the Budget Committee. We urge the maintenance of this appropriation to train annually for 15 days about 20,000 reserve officers.

The Legion has an intimate interest in the development of the Reserve Officers' Training Corps and the Citizens' Military Training Camps as an important part of our national military policy, and recognizes that the money invested in a reasonable amount of military training and discipline is essential to the best development of young America, and that the benefits of this training will be useful to the individual and the Nation in the proper preparation for peace as well as war, and the Legion urges the appropriations that have been recommended by the War Department for this purpose.

The American Legion contains within its all-embracing membership representation from all three of the component parts of the Army of the United States, and urges the country to realize that any attempt to cripple the activities of any component reacts unfavorably upon the other components, and places unfair burdens upon them.

The American Legion does not insist upon either the Regular Establishment or the National Guard functioning at the strength provided for in the Army Reorganization act, but does believe that appropriations that provide for less than 50 per cent of the strength originally planned—280,000 in the Regular Establishment, and

425,000 in the National Guard—weaken our national security, and represents such meager provisions as can not help but jeopardize our ability to take, upon short notice, a national position of readiness.

We urge your committee to recognize these practical facts, and to insist upon necessary appropriations in proportion to our national defense needs, which in our opinion have not been fully recognized by the House of Representatives in their recent passage of the Army appropriation bill.

It is the judgment of the American Legion that the sentiment "back home" supports our position; and, as men who have seen with their own eyes the horrors of unpreparedness, we pledge our honest efforts to President Harding and General Pershing in their endeavor not to have reduced the means for an adequate national defense below a well-recognized line of national safety.

Senator WADSWORTH. Is there anything that you care to emphasize further, Mr. MACNIDER?

Mr. MACNIDER. Nothing, Senator, except what I have stated.

Senator WADSWORTH. Or Colonel Markey?

Colonel MARKEY. No; I think Mr. MacNider has covered the matter very well, Senator. I think we could not do any more than amplify and emphasize what he has said. I believe that the statement is clear and concise, and covers all the points that the Legion is interested in having maintained in the Army appropriation bill.

We thank you very much.

STATEMENT OF BRIG. GEN. DOUGLAS MACARTHUR, UNITED STATES ARMY, SUPERINTENDENT OF THE UNITED STATES MILITARY ACADEMY.

Col. E. J. Timberlake, United States Army, quartermaster and disbursing officer, appeared.

GENERAL STATEMENT.

Senator WADSWORTH. General, I suppose you desire to call our attention to something having to do with the Military Academy?

General MACARTHUR. Yes, sir. There are one or two observations I should like to make on the bill as it was sent over to the Senate from the House.

Senator SPENCER. The items for the Military Academy begin on page 82.

General MACARTHUR. I should like to say, Mr. Senator, that this bill as presented to the House represented a decrease over last year's bill of \$258,000. It provided for no increase of salary for any individual. It provided for no increase of any individuals. There are certain items that the House cut down from the estimates that I should like to present to your attention now.

RATION.

One of these items is the ration of the cadet, found on the bottom line of page 82, sir.

The ration that is provided for the cadet has been for many years based as far as possible upon the actual cost to him thereof. We

have kept compilations of that cost, and we have presented to Congress, as the years rolled by, the actual expenditures that were made. The ration as approved in the last appropriation bill was \$1.08. The ration we should like to ask this year is 90 cents, that difference representing the difference in the cost of food. The estimate as sent to the Senate from the House was 75 cents. That is insufficient. The result will be that the difference will have to be taken out of the pay of the cadet. His pay now is barely sufficient to meet his necessities, and it would be a hardship upon him which would undoubtedly result in cadets going into debt.

I have monthly estimates of the cost of the ration, which I should be very glad to put in the hearings, if you wish. The average cost of the ration in the last 12 months has been \$1.01. In the last four months the cost has decreased, and the lowest level that has been reached is 87 cents. That is at this time of the year, when the prices are lower than they will be in the winter.

Senator SPENCER. Is there much difference in the time of the year, as regards the cost?

General MACARTHUR. It varies perhaps between 5 and 10 per cent, sir.

Senator SPENCER. It is most expensive when?

General MACARTHUR. It is most expensive in the winter. We figure that the average cost will be 90 cents at the minimum. It may be more than that, but it will undoubtedly not be less than that. That represents not only the cost of the ration, the food he actually eats, but it represents the expenditures that are made with reference to preparation of food—that is, the cooks and the mess attendants. Without making any invidious comparisons I should like to draw attention to the fact that at the Naval Academy all of that is paid for by the Government. Their mess attendants and their cooks are paid for by the Government. They are provided from the enlisted personnel of the Navy. At West Point they are not. Those are growing boys, and I do not think 90 cents is an exorbitant price.

Senator WARREN. They are just at the age when they are good feeders.

General MACARTHUR. Yes, sir. They are growing boys, and I say without any hesitation that they are the hardest worked group of men in the United States.

Senator WADSWORTH. What did you say you were averaging for the last four months, or did you give an average figure?

General MACARTHUR. The average for the last four months would be about 93 cents, sir. For the last 12 months it would be \$1.01.

Senator WARREN. You had a minimum of 87 cents, did you?

General MACARTHUR. A minimum of 87 cents; yes, sir. That is the lowest month. That is one of the last four.

PROFESSOR OF POLITICAL ECONOMY AND SCIENCE.

Senator WADSWORTH. Are there any further questions on that item? If not, what about this item of seven professors, \$26,500? Is that a sufficient number?

General MACARTHUR. No, sir; not in my opinion.

Senator WADSWORTH. Please give us your views on that matter.

General MACARTHUR. Two years ago, in the changed curriculum at the Military Academy, we established a chair of political economy and science. We need, of course, a professor for that purpose. It has been cut out of the bill for the last two years. We have a detailed officer there. It is a subject that requires a permanent incumbent; and I should like to make the recommendation that the item in line 19, page 82, be increased by one professor, so as to provide for the pay of eight professors instead of the pay of seven professors.

Senator HARRIS. How much do you pay the professors, Colonel?

General MACARTHUR. A professor is appointed to the rank of lieutenant colonel. He holds that rank for 10 years, and then becomes a colonel. The pay of a lieutenant colonel is \$4,500.

Senator SPENCER. An additional professor would add \$4,500 to this appropriation?

General MACARTHUR. To this appropriation. This officer undoubtedly would be appointed from the Army, and it would not add an officer to the strength of the Army.

Senator WADSWORTH. General, as my bill shows, with its notations, the estimate sent in by the Budget was \$27,000.

General MACARTHUR. Yes, sir.

Senator WADSWORTH. You are asking an increase over and above the estimate, are you not?

General MACARTHUR. Yes, sir.

Senator SPENCER. You can not do that unless you get a supplemental estimate.

Senator LENROOT. We can ask you about it, but you can not ask for it yourself, under the law.

General MACARTHUR. Very well, sir. I am sure that the head of the Budget will approve it.

Senator HARRIS. But if that requires no appropriation, if it will be a Regular Army officer—

Senator LENROOT. But it does.

Senator WADSWORTH. It requires an appropriation. It is a specific appropriation.

Senator SPENCER. If a lieutenant colonel is detailed for this work, the pay becomes a charge on this appropriation and not on the Regular Army appropriation.

General MACARTHUR. Yes, sir; but it would not increase it.

Colonel TIMBERLAKE. That really does not increase the appropriation for the Army, because if it is an officer of the Army his pay will be carried here instead of elsewhere in the bill; but the sum of the whole Army appropriation bill will be the same.

Senator WARREN. There might be a little difference in rank. A man of lower rank might be selected.

General MACARTHUR. Yes, if an officer who was lower than the grade of lieutenant colonel should be appointed.

Senator LENROOT. I should like to ask how it is that this does not increase the aggregate. I understood you to say that it does not. I do not understand why, if this appropriation is made, it does not increase the aggregate appropriation for the Army.

Senator SPENCER. If it is cut out of the Regular Army appropriation, it will be made here.

Senator LENROOT. But it means that we will have to make an increase in the bill.

General MACARTHUR. Yes; exactly.

Senator WARREN. The point is, it might be an officer of lower rank, but still he would be entitled to the pay of a lieutenant colonel there. On the other hand, the matter of 10 years' continuous service is pretty hard to handle under detail.

Senator LENROOT. Then you do not propose that we cut it out of the aggregate? That might be a civilian, General?

General MACARTHUR. It could be a civilian; yes, sir.

FUEL, APPARATUS, COAL, WOOD, ETC.

Senator WADSWORTH. What is your next item, General?

General MACARTHUR. The next one is on page 93, line 22—the item for fuel and apparatus, namely, coal, wood, etc., including labor, \$60,000. The estimate that was made to the House of Representatives was \$70,000. That provides the fuel for the central heating plant which heats and lights the Military Academy. The estimate as submitted to the House read “\$70,000, \$10,000 to be immediately available.” It was requested that that \$10,000 should be immediately available in order that if there were any emergency, due to strikes, we could instantly lay in \$10,000 worth of coal for next year.

I was asked in the House committee if we could do away with making that \$10,000 immediately available, and I said we could. Apparently they misunderstood me, and they did away with the \$10,000 entirely. It is impossible to run that plant for a less sum than \$70,000. It runs from year to year, and the amount of coal we use is practically immutable. The rate of coal is practically fixed at the present time, and we will run just \$10,000 shy if we do not get the \$70,000 that we have asked for.

Senator WADSWORTH. Do you purchase the coal through your own quartermaster, or is it supplied by the Quartermaster General of the Army?

General MACARTHUR. It is supplied to us on contract by the Quartermaster General of the Army. The amount we use is something over 13,000 tons, and the present rate for which we are getting bird's-eye anthracite coal is \$4.62 f. o. b. West Point.

Senator WADSWORTH. That would account for \$60,000 there?

Colonel TIMBERLAKE. \$60,060.

Senator WADSWORTH. Do you burn much wood?

Colonel TIMBERLAKE. No, sir; but we have to have repairs, oil, fuel, and grease.

General MACARTHUR. This provides labor, too.

Colonel TIMBERLAKE. If I may say a word there, General——

General MACARTHUR. Yes; go ahead.

Colonel TIMBERLAKE. This appropriation takes care of all the heating plants about the houses, and the supervision and care of them, as well as this power plant; so we have to hire certain labor and we have to buy materials, for instance, for burned-out grates, and repairs to about 300 other smaller heating plants, house-heating plants; and the \$10,000 is necessary for that purpose as well as to buy the greases and oil and for stoker repairs, etc. Last year we spent \$325 on stoker repairs to this power plant, and we spent \$350 for oils and greases.

In fact, in the House hearings here we have the items of just how all of that is spent.

Senator WADSWORTH. And your labor comes out of it?

Colonel TIMBERLAKE. The labor of repairs of all these house-heating plants comes out of that. Of course, the labor for running the plant itself is appropriated for under "Civilian employees" there; but for carrying out the supervision and repairs of these 300 different house-heating plants we have to hire labor, pipe fitters and steam fitters, to make those repairs, and that comes out of this.

Senator SPENCER. Have you had any unexpended balance of this \$70,000?

General MACARTHUR. No, sir; not from this item.

Senator SPENCER. You have used it right along?

General MACARTHUR. Yes, sir. I will say that I think it was merely a technical mistake in cutting this out in the House committee.

Colonel TIMBERLAKE. In addition to this, I may say that in the last six months we have added the barracks of six divisions in the headquarters that has to be heated from this plant. We have not asked for any increase in this amount for fuel. Within the next year we will add to this plant, to be heated, a new cadet hospital; but we are not asking for any increase in the amount of fuel. We are trying to keep it what we had last year, and it is a fight. Naturally, with those two new buildings, we would come to you and ask for more coal to heat them with, but we have not done it.

Senator LENROOT. How much are you using of the appropriation this year? Are you using it all?

Colonel TIMBERLAKE. Yes, sir. We have practically bought 13,000 tons, and it is all in the bins right now, sir.

Senator LENROOT. And will all of that be used before the 1st of July?

Colonel TIMBERLAKE. No, sir.

Senator LENROOT. Do you have any carry over?

Colonel TIMBERLAKE. We will have probably enough to carry us over until the 1st of August, but I have really bought 800 tons above that 13,000 tons in preparing for this strike that is on now. I have really bought 13,800 tons, and we have enough in the bins to last us until the 1st of August.

Senator LENROOT. What was your carry over of coal at the end of the fiscal year?

Colonel TIMBERLAKE. Very little, if any. We buy it before the end of the year, fill up our bins, and have the contract made before the end of the year, so that they begin to shoot it in there right after the 1st of July. We would have our bids out now for the fuel for the next fiscal year except that this strike is on and we think we are liable to get very much higher prices now than we would after the strike is settled.

Senator LENROOT. What did that 13,000 tons cost per ton?

Colonel TIMBERLAKE. \$4.62 a ton. It amounts to \$60,060.

Senator LENROOT. That you bought when?

Colonel TIMBERLAKE. This past year.

Senator LENROOT. But I thought you said you had just put in a supply.

Colonel TIMBERLAKE. I have bought 13,800 tons altogether, but I have added a certain amount there so as to be sure to carry us over the duration of this strike, if possible.

Senator LENROOT. So that you will get through for the fiscal year with something less than \$70,000?

Colonel TIMBERLAKE. No, sir.

Senator LENROOT. That must be.

Colonel TIMBERLAKE. That is just for coal. We have hired labor and we have made repairs.

Senator LENROOT. This appropriation is only for coal and apparatus.

General MACARTHUR. Including labor—the last item.

Senator LENROOT. Oh, I see; I beg your pardon. Your labor is less than it was?

Colonel TIMBERLAKE. Oh, yes, sir. We never have had our rates up to the war rates. We have fought and done without, so that we have kept our labor rate down considerably below the war rates.

Senator LENROOT. It is a small item; but if you have enough coal to run until the 1st of August—and ordinarily you do not have any—you do get through with less than \$70,000 this fiscal year, necessarily.

Colonel TIMBERLAKE. But in the meantime I will probably let repairs go that ought to be made between now and the 1st of July, because I thought the coal was more important.

Senator LENROOT. That might be, but I am just asking the fact whether you are getting through with less than \$70,000 this year; and if you have a carry over you are.

Colonel TIMBERLAKE. Yes; we will have a small carry over.

Senator HARRIS. It is necessary to have some carry over, is it not?

Colonel TIMBERLAKE. Yes, sir. You can not run right up to the 1st of July and then expect to get coal in there the 1st of July. The whole academy depends on that heating plant. If the heating plant goes out of business, the academy goes out of business, because every building there is heated from that plant.

Senator LENROOT. Exactly; that is what I supposed. When I asked you a few minutes ago what your ordinary carry-over was, you said that this year you would have a carry-over which would last you until the 1st of August, and you said that ordinarily you did not have any.

Colonel TIMBERLAKE. Yes, sir. I thought it was more necessary to buy coal than to make necessary repairs.

Senator LENROOT. I am not criticizing it at all. I just want to get the facts; that is all.

CHAPEL ORGANIST AND CHOIRMASTER.

Senator WADSWORTH. What about this matter of an organist and choirmaster, on page 91, line 13?

General MACARTHUR. The organist has been there for something over 11 years. He is an artist in every sense of the term. He not only acts as the organist but he supervises all vocal training in the Corps of Cadets. He gets \$1,500. That is less than many men receive for manual labor.

Senator SPENCER. Does he get a house?

General MACARTHUR. He gets a house; yes, sir. It amounts, all told, to about \$2,500.

Senator LENROOT. He receives the bonus of \$240, also, does he not?

General MACARTHUR. He gets the bonus; yes, sir.

Senator SPENCER. Does he get any supplies at all?

General MACARTHUR. No, sir.

Senator SPENCER. How old a man is he?

General MACARTHUR. He is a man, I should judge, about 40 years old. He installed the organ there, and if you have ever been there you will realize how extremely underpaid that man is. Of all the personnel of the Military Academy, this individual stands out as the transcendent one that is entitled to an increase. He has been offered \$5,000 to leave the Military Academy, but he is animated by the spirit of the artist, and prefers to stay with that organ which he installed. I may say that that organ is one of the famous organs of the world. I have included in previous estimates an increase for this position.

Senator HARRIS. Mr. Chairman, I suggest that you take that up with the Budget if you are going to take up this other matter.

Senator WADSWORTH. That would be incumbent upon the Military Academy authorities and the Secretary of War. If they regard it as sufficiently important for them to bring it to the attention of General Dawes, that is the only chance.

General MACARTHUR. May I read into the hearings a letter from the Secretary of War?

Senator SPENCER. Is it in the House hearings already?

General MACARTHUR. Yes, sir; it is at page 1412.

Senator WADSWORTH. It need not be repeated.

Senator LENROOT. Just refer to the page of the record.

General MACARTHUR. Page 1412. There is a letter to the Budget officer from the Secretary of War. Do you wish me to read it?

Senator LENROOT. No; we use the same record.

Senator WADSWORTH. We use the same hearings, you see.

General MACARTHUR. The Secretary in that letter fully approved of the increase.

There are one or two other items that I was going to speak about, but I believe under the law I am not entitled to bring them up; so I have no other items I care to discuss here.

Senator WADSWORTH. Major Benedict is to discuss, I believe, two or three matters connected with the personnel, especially as affected by the House bill provisions on pages 15 and 16. This has been discussed in part, but the War Department wanted Major Benedict to have an opportunity to point out some special features, which may be termed the more technical features.

STATEMENT OF MAJ. JAY L. BENEDICT.

Major BENEDICT. The study that I have made of this subject of the reduction of officers has been in the nature of a comparison between the provisions of this bill and the bill S. 3113, which was prepared and submitted by the War Department.

The War Department bill provided for 13,000 officers suitably readjusted to the different grades and branches, with provisions for the necessary elimination and the procurement of officers to bring about that readjustment.

EFFECT OF PROPOSED REDUCTION ON MORALE.

The House bill now under consideration provides for a reduction of 2,000 more, or 15 per cent more than the bill proposed by the War Department. However, the worst effect is not the reduction in number. The manner in which the reduction is proposed to be made in this bill, I think, would have a very adverse effect on the morale of the Army. It is true that this bill provides for demotion and thereby would obviate as many officers being put off the active list as would otherwise be the case, but the computation I have made indicates that at the very least under the bill 10871 there would have to be 1,863 officers eliminated from the active list of the Army. That assumes that the demotion would be used in making a part of the reduction.

REDUCTION BY GRADES.

All of the inquiries I have made indicate that the legal opinion is that the recommissioning of an officer in the lower grade is something that can not be forced upon him; that he holds an office and that he can be tendered an appointment to the lower grades. If that be true, and demotions be declined by these officers, if they feel that they do not care to accept the lower grade, the total elimination under this bill would be raised to 2,980 officers, so the actual elimination under the bill will be something between those limits of 1,863 and 2,980.

Senator LENROOT. Under the House bill?

Major BENEDICT. Under the House bill; yes, sir.

Senator WADSWORTH. On what basis did you make your estimate that 1,863 would have to be eliminated if demotion were permitted? How did you arrive at the figure for those who would accept demotions?

Major BENEDICT. That figure is arrived at on the assumption that each officer subject to demotion accepts it. For instance, we have to make a decrease of 210 in the grade of Colonel. If the junior 210 colonels were tendered a recommission in the lower grade, and all accepted, and so on down through the other grades, there would still have to be 1,863 officers eliminated from the Army. Now, the other extreme that I have quoted is that if none of those who were tendered a recommission in the lower grade accepted, the elimination would amount to 2,980.

Senator WADSWORTH. Let us understand that. Of course, you have to start your demotion process at the top grade. If you demote anybody, you must start in the grade of colonel?

Major BENEDICT. Yes, sir.

Senator WADSWORTH. And it would be necessary to take the 210 junior colonels, demote them to lieutenant colonels, thereby displacing 210 lieutenant colonels, get their consent to demotion and demote them to majors, thereby displacing 210 majors, getting their consent to be reduced to captains, and so on down until you hit the grade of second lieutenant. Is that accurate or inaccurate.

Major BENEDICT. I have that here in figures. I can show what the cumulative effect is as you go down from grade to grade.

Senator WADSWORTH. Yes; I think that is interesting. I think I have understated it.

Major BENEDICT. Assuming adjustment by demotion from the top, the first step would be to demote 210 colonels. If you wish, I can give some idea of what the length of service would be of the men who would be included in that demotion.

Senator WADSWORTH. Let us get that afterwards. We can come back to that.

Major BENEDICT. This demotion would give us, adding that number to what we now have, 884 lieutenant colonels. To reduce the number of lieutenant colonels to the 437 provided by the bill, it would be necessary to demote 447 of the junior lieutenant colonels.

Senator HARRIS. How many colonels have you? You say you have to demote 210.

Major BENEDICT. Now authorized 599, sir.

Senator WADSWORTH. You are speaking now of the terms of this bill?

Major BENEDICT. Yes, sir. Five hundred and ninety-nine is the number now authorized, and this bill reduces it to 389, a reduction of 210.

Senator LENROOT. Will you not repeat that?

Major BENEDICT. Suppose we start at the top again.

Senator LENROOT. Yes; start at the top again.

Major BENEDICT. We now have 599 colonels. Under this bill we must reduce that number to 389.

Senator LENROOT. What was the 884?

Major BENEDICT. Lieutenant colonels. We would demote 210 colonels, which, added to the 674 lieutenant colonels we now have, would give us 884 lieutenant colonels. Under this bill we must reduce to 437 lieutenant colonels. To do that we would have to demote 447 lieutenant colonels.

Senator SPENCER. That gives you how many majors?

Major BENEDICT. Now, the next step, in order to reduce to 1,458 majors, would be to demote to the grade of captain——

Senator SPENCER. After the lieutenant colonels have gone to their majority how many majors does that give you a total?

Major BENEDICT. Two thousand six hundred and ninety-two, sir.

Senator HARRIS. You would have 2,692, and then how many would you have to demote?

Major BENEDICT. And we would have to reduce to 1,458. To do this we must demote 1,234 of the junior majors. Now, the demotion of this number of majors would increase the actual number of captains to 5,724.

Senator WADSWORTH. How many captains in this bill?

Major BENEDICT. This bill authorizes 2,915.

Senator HARRIS. And you would have to demote how many?

Major BENEDICT. This number is to be reduced to 2,915. That would be a reduction of 2,809.

Senator HARRIS. A demotion of that many?

Major BENEDICT. Yes; practically so. Now, there is a little intricate step in there that would prevent the demotion of the entire 2,809, because under the bill there may be only 2,769 captains, so that is as many as you can demote. You would not have places for 40 majors. So to reduce to the proper number of captains you would have to discharge 40 and demote 2,769.

Senator LENROOT. That is your first elimination?

Major BENEDICT. That is our first necessary elimination. In other words, you would fill your first-lieutenant grade entirely with demoted captains. Now, that demotion would result in our having 5,829 first lieutenants. Of these 2,769 are demoted captains, and they complete the authorized complement of first lieutenants. Therefore every present first lieutenant would have to be disposed of, and we now have 2,940.

Senator LENROOT. They would have to be demoted?

Major BENEDICT. Some of them. There is room for only 1,749 second lieutenants under this bill, so of your 2,940 you could demote 1,749. The junior 1,191 would have to be eliminated.

Senator LENROOT. That would make the total elimination 1,231?

Major BENEDICT. That makes the total elimination 1,231. That is for the single list only. Of course, this bill also provides a very great elimination in the Medical Department. In fact, the total reduction there would be 632, which added to your 1,231 gives 1,863 in all that will be squeezed out of the Army under this bill as the minimum.

Senator WADSWORTH. If all the other people referred to accept demotions?

Major BENEDICT. If they all accept demotions; yes, sir.

Senator LENROOT. Can you give us in the same way the War Department plan and the Military Committee's plan—how that works in that same respect?

Major BENEDICT. The War Department plan does not embody demotion.

Senator LENROOT. I understand it does not. But what I mean is, can you state just how you get it down in the different grades in that same way?

Senator WADSWORTH. Just a moment before that. You were going to go back and give us the average ages in these several grades, or some information on that line.

Major BENEDICT. The present lieutenant colonels in the Army vary in length of service from over 21 years up to 23 years. This block of 447 that would be demoted would extend up to a man who is No. 720 on the promotion list, who was commissioned on the 2d of February, 1901. The block would include a large number of the men commissioned in 1902 as the result of their service in the Spanish-American War, would include all classes of 1900 and 1901 of the United States Military Academy.

The juniors demoted would have 21 years' service.

Senator WADSWORTH. On the average?

RATE OF PROMOTION.

Major BENEDICT. Yes; that is, of the juniors. Now, it is estimated that at least 10 years would be required for these officers to get back to their grade of lieutenant colonel.

Senator LENROOT. How would that rank compare with the pre-war condition as to the length of time to acquire the demoted rank? Do I express myself so you understand what I mean?

Major BENEDICT. The rate of promotion before the war, of course, was quite varied.

Senator LENROOT. Because we did not have the single list?

Major BENEDICT. We did not have the single list, and in some branches of the service it was much more rapid than in others, and I am rather at a loss as to how to make any general comparison between the length of service upon attaining the different grades before the war.

Senator LENROOT. Can you give us a general idea, for instance, how many years a man would be in commissioned service, generally speaking, before he attained the rank of colonel?

Major BENEDICT. I would say, averaging up the various branches, that a man did not attain his colonelcy until he had 35 or 36 years of commissioned service.

Senator LENROOT. General Pershing had something like 20 years before he attained the rank of captain, did he not?

Major BENEDICT. Yes, sir; and it was no uncommon thing to have a number of old gray-haired first lieutenants before the war.

Senator LENROOT. My point was that even if this demotion plan should be carried out they still would have a rank higher than would ordinarily be attained in the same number of years of commissioned service before the war. Is that a fair statement?

Major BENEDICT. I believe they would be just about in the position that they were before the war with respect to promotion.

Senator WADSWORTH. You are skipping lieutenant colonels.

Major BENEDICT. The data that I gave was for the lieutenant colonels.

Senator WADSWORTH. I thought the data had to do with the 210 colonels.

Major BENEDICT. No, sir; the data for the colonels is that the eliminations would extend up to about No. 225 on the list, a man who was commissioned in April, 1898.

Senator WADSWORTH. You did not give that.

Major BENEDICT. And would include the United States military classes of 1898 and 1899 and a large part of the Spanish-American War appointees.

The data I gave was for the 447 lieutenant colonels who would be demoted to the grade of major.

The block of majors who would be demoted would extend up to a man commissioned the 28th of January, 1910. He would go back to the grade of captain.

I have another computation here that was made, assuming an adjustment from the bottom. That would mean that the men in the lower grades would be taken care of and the squeezing out that was done would be up near the top. If the committee is interested in that, I can give it, but I think it is a method that probably has so little chance of being adopted that it would not be useful.

REDUCTION BY GRADES UNDER PENDING SENATE BILL.

Senator WADSWORTH. Perhaps you now can come back to Senator Lenroot's question and state how the proposed legislation which is pending before the Military Committee would bring about the reduction.

Major BENEDICT. The reduction proposed there in the grade of colonel was from 599 to 494. This would mean an elimination of 105 colonels, one-half the number that must be disposed of under the House bill.

Senator LENROOT. That would be elimination through retirement?

Major BENEDICT. The bill proposed by the War Department proposes, first, to take advantage of existing vacancies by declaring that any vacancies not filled would not be filled; second, by the ordinary processes of elimination which are going on now—retirements for physical disability, retirements upon their own application for age, etc.—with the selection of such number of the least effective as might be necessary to bring it up to the total elimination of 105.

Senator LENROOT. When would you arrive at that number?

Major BENEDICT. We asked five months from the date of the approval of the act in which to accomplish the elimination and arrive at the new number.

Senator HARRIS. Five months from July 1 or five months from the passage of the act?

Major BENEDICT. Five months from the passage of the act.

The reduction in the grade of lieutenant colonel proposed in the War Department bill is from 674 to 555, a reduction of 119. We proposed to accomplish that in the same way as in the reduction in the grade of colonel.

Reduction in the grade of major proposed by the War Department bill was from 2,245 to an ultimate number of 1,850. The bill proposed, however, that the reduction to be made in five months be a reduction of 201, leaving us with 194 majors in excess of the ultimate number of 1,850, it being contemplated there would be no more promotions to the grade of major until that 194 had been absorbed by normal processes and we had gotten down to a number of 1,850. It is estimated that three or four years would be required for that absorption. That would slow up the promotion from the grade of captain to the grade of major.

Senator WADSWORTH. For that length of time?

Major BENEDICT. During that time there would be no promotions.

Senator LENROOT. Do I understand then that you would not bring it down to the minimum number in five months—that there would be this exception to that?

Major BENEDICT. Yes, sir. The total reduction in the number of majors from our present authorized number to the new ultimate number we show is 395. We wish to bring it down by 201 during the five months and the remaining 194 by natural losses after that time.

Senator WADSWORTH. What is the reason for that exception, Major?

Major BENEDICT. There are two very excellent reasons for it. One is that promotion now from the grade of captain to the grade of major is being attained on too short service. The promotions now are in the middle of the class of 1916 from the Military Academy.

Senator HARRIS. Promotions to major?

Major BENEDICT. Promotions to the grade of major from the grade of captain. It is believed that the men in the grade of captain probably will be better off and the service will be better off if they do not get their majorities too rapidly. The other advantage is that this bill would bring us down, as it stands, to a total of about 12,000 officers. We do not feel we can function efficiently without 13,000.

Senator HARRIS. The classes of what year are in the grade of first lieutenant now?

Senator LENROOT. The class of last year.

Senator HARRIS. Then, what classes that have been graduated are not in the captain class?

Major BENEDICT. The 270 men who graduated the 2d of July, 1920, and the 17 men who graduated in June last year, and the 285 who graduated in November, 1918, are not captains.

Senator WADSWORTH. They are all first lieutenants?

Major BENEDICT. They are all first lieutenants.

Senator LENROOT. And all the 1919 class are captains?

Major BENEDICT. There was no graduation in 1919. Also I find that 115 men who graduated in June, 1918, are still in the grade of first lieutenant. The engineers of that class and all the classes above that are above the grade of first lieutenant.

Senator LENROOT. Will you repeat that statement?

Major BENEDICT. The class that graduated in June, 1918, except those commissioned as engineers and all who graduated since then are now in the grade of first lieutenant; all the previous classes are above that grade.

Senator HARRIS. You graduated two classes in 1918, did you not?

Major BENEDICT. Yes, sir.

Senator HARRIS. Are they both in that grade?

Major BENEDICT. Yes, sir; in the grade of first lieutenant; there were about 510 men in the two classes.

Senator WADSWORTH. Major, you were discussing the second advantage on which this special exception in the grade of major was based?

Major BENEDICT. The second advantage is that we retain some of these men in the service to assist in carrying on during the time that we are filling up at the bottom. I stated, as it stands it would bring us down to about 12,000 officers and we need 13,000. If we did not provide for holding on to some of the additional captains or majors for a natural process of elimination, the reduction would be about 600 more and bring us down to about 11,400. Now, it will take some little time to procure the new lieutenants and get them on their way in the service. The maximum that we ought to try to take in in a year is 1,000, so if we reduce below 12,000 we would not be able to get back during the fiscal year to the minimum number of officers the department feels is absolutely necessary to carry on all its functions.

We have there the double advantage of slowing up promotion where it should be slowed up and of holding on to a gradually decreasing group of 589 young officers to offset the shortage in the lower grades.

Senator LENROOT. Assuming, Colonel, the maximum number should be fixed by Congress at 12,000 instead of 13,000, how would you work that out under your plan?

Major BENEDICT. I believe, sir, I would allow this to stand the same and have 1,000 less authorized lieutenants.

Senator WADSWORTH. Second lieutenants?

Major BENEDICT. Well, really we are making very little distinction in the War Department bill between the first and second lieutenants. There is not much distinction in their duties. What we are proposing is to do about the same thing the Navy does, bring a man in and when he serves three years he then goes up to the next grade. But the War Department plan was that with 13,000 officers we should

have 5,735 lieutenants, with the understanding that they would serve as second lieutenants until they have three years' service and then be promoted to the grade of first lieutenant.

Senator WADSWORTH. That was the calculation of the rate of promotion?

Major BENEDICT. Yes, sir. If we should have less than 13,000 officers authorized I believe the reasonable thing to do would be to decrease the number of authorized lieutenants, because you can not decrease the important overhead duties, and, as I can show the committee, there is great disparagement now in the rates of promotion between the Army and the Navy, for instance, and there is no use in being fooled by a little present apparently rapid promotion. We have some pretty accurate statistics that show what we are coming to and what we are going to come to very rapidly. And, of course, this division of officers in the various grades, as I view it, is done on the consideration of three factors. We have got an economical factor that must be considered; we must consider the organizational needs and the flow of promotion, and neither from the standpoint of organizational needs nor from the standpoint of reasonable flow of promotion do I believe that we should go below the number of officers of the grades above lieutenant that the War Department has recommended.

Senator LENROOT. Do we not now have many captains performing the duties of lieutenants?

Major BENEDICT. Yes; we have. We have organizations that, instead of having a captain and lieutenant on duty, will have two captains on duty.

Senator LENROOT. How many lieutenants have we now?

Major BENEDICT. Probably this figure will be just as satisfactory. It has been estimated that on June 1 we will have 2,940.

Senator LENROOT. And what is your number on the basis of 13,000?

Major BENEDICT. The number was 5,735 lieutenants, so that even deducting 1,000 from that we would have 4,735 lieutenants with a limit of 12,000 officers.

Senator WADSWORTH. You say deducting 1,000?

Major BENEDICT. Yes, sir.

Senator WADSWORTH. That is on the theory that if the idea embraced in the inquiry made by the Senator from Wisconsin was carried out the reduction would be made to 12,000 maximum instead of 13,000?

Major BENEDICT. Yes, sir. Now, I might state that under the law, of the single-list officers of the Army 46½ per cent would be in the lieutenant grades. By comparison with the Navy distribution, they have 41½ per cent in corresponding grades. So, even though you should cut off the 1,000, you would be approaching an equality in the percentage of the lieutenants in the two services.

Senator LENROOT. Can you make a proper comparison between the Army and the Navy? Of course, the duties are very different in the two branches.

Major BENEDICT. They are very different, sir; but I feel that the duties that are now imposed on the regular officers, the instructional training, reserve force, carrying out the citizen's camps, the R. O. T. C. duties, etc., if anything, we need a higher percentage of officers in the upper grades.

Senator LENROOT. Can not lieutenants perform those duties?

Major BENEDICT. I do not think a lieutenant would be very satisfactory to a National Guard organization or the organized reserve.

Senator LENROOT. None below the grade of captain are performing those duties?

Major BENEDICT. No, sir; the Chief of the Militia Bureau is very much opposed to going below the rank of captain, and I know General Pershing is very much opposed to going below that rank for the organized reserves. We have an immense reservoir of people who have had experience in the war, and to send out as their instructors young lieutenants who have had no war service would probably result in no great benefit to them or to the military service.

Senator LENROOT. Then, Colonel, if that reduction was made of the 1,000 lieutenants, how would that affect the service?

Major BENEDICT. I think we would be crippled to just that extent.

Senator LENROOT. Where would the shortage apply?

Major BENEDICT. Well, the shortage would probably be somewhat with organizations and somewhat with the schools.

Senator WADSWORTH. You mean the service schools?

Major BENEDICT. The special service schools. We contemplate having these lieutenants enter the schools, getting their basic education there, so that they are fit and ready to go out with their organizations and become valuable officers in the least possible time; and I believe that the effect of a reduction below this number here, a reduction of 1,000 or any other number, would be felt principally at the schools. It might not make a great deal of difference this year, but you can readily appreciate that the effect of it would be felt in the future, for it means we have a year in which there is a slowing up in the procurement and in the basic education of officers, and that is going to be felt when the time comes that those officers should advance into the higher grades. One thing above all that I think we need is a uniform flow of new blood in the service.

Senator LENROOT. Do you think, Major, that after four years of commissioned service attaining the rank of captain is a good thing?

Major BENEDICT. After four years' service?

Senator LENROOT. Yes.

Major BENEDICT. No, sir; I do not.

Senator LENROOT. Then if captains were demoted to first lieutenants, what would be the harm?

Major BENEDICT. Well, sir, that harm comes largely in the moral effect that you have on the individual in taking away from him something he has had.

Senator LENROOT. In ordinary times they serve 30 years to attain that rank, and now if they attain it in 4 I can not see that they have any just ground of complaint.

Major BENEDICT. I would like to invite attention in that connection to this: Speaking of captains, the number now authorized is 4,490. The War Department proposition is ultimately to get down to 3,700. It proposed within five months to eliminate 395.

Senator SUTHERLAND. Eliminate or demote?

Major BENEDICT. Eliminate 395.

Senator LENROOT. You do not demote at all?

Major BENEDICT. No, sir; leaving all the excess except the 395 to be absorbed by natural processes. Now, I think that elimination of 395 can be very easily taken care of. It is only about 8 per cent,

and our records will show now that we have nearly that percentage of officers that are rated as below average, so that it is not going to reach up into the class of thoroughly rounded out, efficient officers, and what are not taken care of by elimination can be taken care of by the acceptance of applications for discharge. The proposition of the War Department is instead of demoting the junior 395 to let them all hold their grades, but to stop any promotion to that grade until the 395 have been absorbed, which would probably be three or four years. By that time the men will be reaching their captaincies on seven or eight years of commissioned service. Of course the alternative to that is to tender that 395 an opportunity to go back into the next grade. We feel that a large number of them would not accept it.

Senator WADSWORTH. There is a complication in there; at least a psychological one. The grade of captain now contains a very, very large number of former emergency officers who served in a grade certainly as high as captain during the war, some of them higher, and who are somewhat older than the West Point graduate in the same grade, who, if asked now to take the rank of first lieutenant, would certainly suffer mentally at least to a considerable extent.

Major BENEDICT. I think that is a very important consideration.

Senator SUTHERLAND. Will there not be a very large number of resignations if this plan of demotions is figured out?

Major BENEDICT. I am afraid there will be an immense number. I do not believe, sir, that more than 60 per cent of the men tendered demotion would accept it. I have made a great deal of inquiry among all the junior officers that I have come in contact with since this House bill appeared and asked them how they felt about it, and the answers seemed to be almost without exception that they would not be willing to step back.

Senator SUTHERLAND. It particularly means that your best men among those tendered demotions would be the ones who would step out?

Major BENEDICT. That is the way I view it, that the man who is probably of the least value will accept the demotion and the young, ambitious, live man, who is of more value to us, is going to get out. Of course all these things depend upon human nature, and you never know just what they are going to do.

Senator SUTHERLAND. And we are hardly back to pre-war conditions as to living expenses and other conditions, so that would operate to cause a larger number of resignations.

Major BENEDICT. It is bound to, sir. I am now holding on my desk a number of tenders of resignations of officers in the Army. They cite the unsettled conditions and uncertainty as to their pay, etc., stating they have gotten married and taken on certain obligations and do not see how they can continue with an Army career. We are holding those up to use in making a reduction. They are potential reductions in any reduction that has to be made, but they are indicative of the feeling among the junior officers.

Senator LENROOT. What grade are those?

Major BENEDICT. Those I speak of are captains.

Senator WADSWORTH. Of course, the uncertainty about the pay is one of the big elements in that situation.

Major BENEDICT. That is an immense element. The uncertainty as to the permanency of the commission is also quite an element I find. They feel that they had better get out and tackle something else while they are young enough and not become committed to an Army career with the constant feeling that with fluctuations in the strength of the Army they may be squeezed out at any time.

Senator WADSWORTH. What else did you want to discuss in connection with the pending legislation?

Major BENEDICT. In all the War Department's reduction of single list officers in five months would be 820. The ultimate number to be absorbed in the grades of major and captain is an additional 589. As compared to that the reduction in the House bill is 2,980 from the single list.

REDUCTION IN MEDICAL CORPS OFFICERS.

Now, going to the Medical Corps, the House bill would eliminate 340 out of 1,133 medical officers. There can be no demotion there, unless the basic law is changed. As the law now stands the medical officers gets his promotion when he completes a certain number of years' service, not when a vacancy occurs, so demotion is not applicable.

I might state that the number of 340 I have assumed from a calculation that under the House bill the number of officers of the Medical Corps would be 793. There are a few elements of uncertainty in that calculation. The House bill purports to continue the provisions of existing law that the number of officers of the Medical Corps shall be $6\frac{1}{2}$ per 1,000 enlisted men. Now, the existing law states that it is $6\frac{1}{2}$ per 1,000 of the enlisted strength authorized from time to time. In making the calculation I assumed that the enlisted strength authorized is 115,000.

I further assumed that the enlisted strength authorized for the Philippine Scouts is 7,000. I have no reason for the latter assumption except a report that accompanied the bill. The bill itself does not state.

And that brings to my mind a point that I happened to hear discussed yesterday as to why not eliminate the number 115,000 from the bill and simply appropriate an amount. You are unfortunately—at least I think it is unfortunate—committed to having the strength of the Medical Corps and other branches proportional to the authorized strength of the Army. The only way we can compute it is to know what is the authorized strength of the Army. Unless the appropriation bill changes the authorized strength it seems to me that we stay at the strength authorized. I think it is fully the intent of the law that the authorized number is the number of people that there is pay appropriated for. At least, I have always felt so until I read the Navy bill and found that—they have a similar provision of law—the bill that was brought out provided for reduction of enlisted personnel and none for officers. So that has somewhat shaken my belief that the number authorized is the number appropriated for. At any rate, this number was computed on the assumption the authorized strength of the Army was to become 122,000, and that assumption was the only one which fits in with the total of 11,000 in making the computations under the House bill.

Senator LENOX. You think whatever number the committee does decide to appropriate for, that number, whatever it is, should be stated in the bill?

Major BENEDICT. Yes, sir; even though it was stated that the number should average a certain number during the year. It probably could be stated in a way that you could go a few above it, but certainly it leaves us in a bad way when there is not a statement in the law as to what is the authorized strength of the Army, and we are very loathe to have those things left open to interpretation.

I desire to state that the total reduction in the Medical Corps on the basis that I have assumed would be 340 officers. That would be 30 per cent of the present Medical Corps.

I find in the composition of the Medical Corps now that of the 1,333 officers only 575 are pre-war officers and 758 are officers appointed during and since the war. So if there must be a reduction of 30 per cent in that corps and 340 officers must go out there must be an elimination of a large number of those men appointed on the basis of their war service. This applies to the Medical Corps to a greater extent probably than anywhere else in the service, although the same thing is true to some extent in the lower grades of the single list.

In the Dental Corps a reduction of 98 must be made to get down to a number of 134. I find that reduction would be 41 per cent. In the Dental Corps now we have 73 pre-war officers and 159 that were appointed during and since the war, so that the elimination of 98 there also would necessarily take in a large number of the war appointees.

Senator SPENCER. These figures, Major, are right up to date, are they?

Major BENEDICT. Yes, sir.

Senator WADSWORTH. They differ slightly from figures that have been given.

Senator SPENCER. That difference would be accounted for by a few days' difference in time, probably.

Major BENEDICT. I would like to state in this connection that the figures I have given for the purpose of this discussion and for the purpose of preparing the estimate were made on the assumption that whatever bill we were going to have affecting the personnel of the Army would be enacted about June 1. We know pretty accurately now what losses are in prospect between now and June 1, and I am basing all of these figures upon the condition that we have assumed as of June 1, or the time that the bill would be enacted.

In the Medical Administrative Corps the reduction would be 61. That is a reduction of 55 per cent. All of those men are postwar appointees. We had no Medical Administrative Corps before that.

Senator WADSWORTH. They were postwar personnel, but they were enlisted men prior to the war?

Major BENEDICT. Yes.

Senator WADSWORTH. And they are now officers up to the grade of major?

Major BENEDICT. Yes, sir; they were appointed officers of the Medical Administrative Corps on the basis of their war service?

Senator SPENCER. But they were all old-time noncommissioned officers?

Major BENEDICT. Yes; there were a large number of them non-commissioned officers of the Medical Department who served as officers of the Sanitary Corps during the war.

In the Veterinary Corps the reduction in this bill would be 48, or 30.5 per cent. In the Veterinary Corps now we have 39 pre-war officers, and the remaining 118 men were appointed during or since the war, so there the elimination involved in the bill would necessarily take a large number of the war appointees.

In the chaplains, the reduction under this bill must be 71, which is a reduction of 40 per cent. We have 43 pre-war chaplains and 133 that were appointed during or since the war, so that there the 71 must take in a large number of the war appointees.

Senator LENROOT. Just what bearing do you think that has on this question?

Major BENEDICT. The point that I was trying to bring out, of course, is, first, that there is a very large elimination imposed upon the Medical Department and the chaplains by the bill, and that this elimination is going to mean putting out of the service men that we have just gotten through appointing on the basis of their war service. It indicates that a large elimination of efficient officers will be necessary.

Senator LENROOT. You do not say that for that reason the Government ought to keep those men in the service if it does not need them?

Major BENEDICT. No; I do not mean to say that. As a matter of fact, I feel most strongly that we do need them.

Senator LENROOT. If we are going to reduce the Army, and the assumption is there is to be quite an extensive reduction, we either did not have enough of those officers or we do not need that many now. Which is true?

Major BENEDICT. The law as it stands now authorizes, for instance, for the Medical Corps 64 officers per 1,000 enlisted men. That number would be all right for an army of 150,000 or more. When you reduce the Regular Army below 150,000 you are not reducing the other duties that the Medical Corps is called upon to perform. They have still got to do their share of work in connection with the citizens' training. We have medical officers on duty with the National Guard, we have medical officers with the Organized Reserve, we have medical units of the R. O. T. C. We need a large number of medical officers for the training camps during the summer. It is the view of the War Department, and it was provided in the War Department's proposition, that the number of medical officers be fixed at 1,053 and not fluctuate with enlisted strength.

Senator LENROOT. I can see, of course, that it would not be a proportionate reduction, but I can not see how it is that a reduction of 30,000 men in the Army does not necessarily mean we should have some reduction in those corps. For instance, take the Veterinary Corps. You have fewer horses in the Army and I suppose the chief duty of the veterinarian is to take care of horses.

Major BENEDICT. I think probably their meat inspection work uses up as many veterinarians as the horses do.

Senator LENROOT. Even with that there are not as many supplies bought.

Major BENEDICT. The quantity of supplies would be less, but I doubt very much if the inspection points where you have to have an inspector would be reduced. It is a good deal like the principle that applies to the line of the Army. You may reduce the Army several thousand men and if that reduction is carried out by doing away with regiments, of course, there is necessarily a certain number of officers released; but if it is carried out by reducing somewhat the enlisted strength of each unit and keeping the units you already have and thereby not interfering with your plan of tactical organization, you need as many officers as before the reduction. You need as many officers for a company of 80 enlisted men as for a company of 100 enlisted men—very little difference. You have a tactical organization which becomes smaller in personnel, but as far as the leaders and officers are concerned it still requires about the same number.

Senator LENROOT. I suppose you will grant there would be some point in the size of the Army where it would affect the number of officers. If a reduction of 20,000 would not affect it, would it be 50,000? It would be somewhere.

Major BENEDICT. I grant you if you go far enough in the reduction of enlisted strength—go so far that you have to do away with a large number of organizations entirely—you release a certain number of officers. Of course, the feeling we have is that you have one Army which has three components, and when you do away with the organization in one component you have got to stress that much more the other components if you are not going to reduce the entire Army.

The plan the War Department has had in mind, I am sure, has been that whatever could be released from the troops could be used for the National Guard and reserve.

Senator LENROOT. The policy of Congress is to reduce the Regular Army and go on with the other two divisions as we have been going on. Your thought is that if we reduce the Army we are going to increase the activity in the other two branches. That is an assumption that does not necessarily follow at all.

Major BENEDICT. No, sir. There is only one thing that I might state, that several months ago I was assigned the special task of making a computation of how many officers the Army needed with the Army as then authorized—150,000 men—with all the other activities, to have one officer for every job, and that totaled up 16,500 officers. The organization division made certain changes in their plans for training centers and organization of the Regular Army that brought that down to 15,600 officers, and that is what it is now. Those 13,000 officers are not a full complement for the Military Establishment. A full complement would be 15,600.

Senator SPENCER. You mean a full complement for 150,000 enlisted strength?

Major BENEDICT. For 150,000 enlisted strength and for carrying on the reserve activities as they are now planned.

Senator LENROOT. Well, the reserve activities are limited by the appropriations, are they not, Colonel?

Major BENEDICT. Well, to some extent; yes, sir.

Senator LENROOT. Well, to a large extent?

Major BENEDICT. Of course, I do not believe, unless you very materially curtail your appropriation for the National Guard, less officers would be needed for instructors with the National Guard.

Still, if the States decided to maintain those organizations without the support of Federal appropriations there will be a demand for regular officers for those duties.

Senator LENROOT. With respect to the Reserve Officers' Training Corps camps, for instance, the number of these officers is dependent upon the number that are trained or the number given them to train. is it not?

Major BENEDICT. We are making no estimate for officers for anything as temporary as civilian training camps or reserve officers' summer training camps. It is contemplated there that officers will be taken away from other duties for that temporary duty of carrying on those camps.

Senator LENROOT. But I thought, Major, you spoke of that as one of the needs these officers would have to fill, irrespective of the size of the Army.

Major BENEDICT. I did speak of that in connection with the Medical Corps. In the line of the Army, if we have a battalion, we will say, stationed at a post and have one medical officer for that battalion, we can not pull that medical officer away and send him up to Plattsburg because there is a training camp there. We can pull out 25 per cent of the line officers there, because we have more than one, but with the medical service and dental service and veterinary service you will find very frequently at the smaller posts you have got down to the irreducible minimum of one. Now, unless you maintain a little reserve, you have nothing to call upon for your temporary activities. That was the point I had in mind, sir, when I mentioned especially the necessity for a sufficient number in the Medical Corps.

Senator LENROOT. And, of course, the scattering of the force all over in small units means adding to the expense of the Government in every way, does it not?

Major BENEDICT. It does, absolutely; and, as I see it now, the Army going back and occupying its smaller posts, our demands for officers is going to be greater rather than less.

Senator SPENCER. That would mean in the Medical Department that, even though the Army were reduced to the number provided by the House bill, it would not permit of a reduction in the medical officer personnel as provided by the House. In other words, you would need more medical officers than the House has provided even though the number of enlisted men were reduced as the House has provided?

Major BENEDICT. Yes, sir; that is the position the department takes. As a matter of fact, if the House provision with respect to the number of officers for the whole Army is enacted into law, then we would want to recast the proportion of those that there should be for the Medical Department.

Senator SPENCER. How could you recast them if the number of medical officers is absolutely fixed? You have got to have a medical officer for a post even though there are not nearly as many men there as before. I can see how you can reduce on the line—Infantry or any other branch of the service—but even if the Army be reduced to 150,000, how could you reduce the number of medical officers?

Major BENEDICT. It would not permit of any great reduction, sir.

Senator SPENCER. It seems so to me from what you say.

Major BENEDICT. Of course, we would not want to get into the absurd situation of having of the total number of officers for the Army 25 or 30 per cent of them in those branches. When you get down to a smaller total number of officers for the Army we have got to recast our missions and our activities in some way to accommodate to the smaller number.

Senator SPENCER. Am I right in thinking, Major, that in your view, even though the Army were reduced to 115,000, as the House provides, nevertheless the officer personnel which they have provided is still very, very insufficient?

Major BENEDICT. Absolutely, sir. I feel that with the enlisted strength as provided in the House bill the officer personnel should be as provided in this bill S. 3113.

Senator SPENCER. And that is approximately 13,000?

Major BENEDICT. It would be 13,000 by the end of the fiscal year.

Senator LENROOT. That is assuming, I presume, Major, that the reduction will not lessen the number of tactical organizations; but if the reduction was carried out, not simply by cutting down the number of men in each organization but by reducing the number of organizations, then your statement would not follow?

Major BENEDICT. I grant that. If you reduce the number of organizations, you release some officers.

Senator SPENCER. A large number. For example, if the whole 115,000 men, except what we have overseas, were centered at Camp Benning and every other post in the country was eliminated you certainly would not need that number of officers.

Major BENEDICT. No, sir; if you had any such concentration as that you would not.

Senator HARRIS. How many officers have you on detached duties of all kinds?

Major BENEDICT. How many actually now on detached duties?

Senator HARRIS. Yes.

Major BENEDICT. The latest report that has been compiled is as of March 31. That report shows 6,625 on duty with organizations, which includes all organizations in the United States and the insular posts and the coast defenses. That 6,625 officers is approximately 20 per cent below the number that we should have according to the present peace-strength tables of organization. In other words, the organizations have not a full complement of officers. The shortage is about 20 per cent.

Senator LENROOT. Is the peace-strength organization based upon the maximum number allowed by the defense act?

Major BENEDICT. Well, sir, the tables of organization are not arrived at from any consideration of the total number of officers available.

Senator LENROOT. Or men?

Major BENEDICT. No, sir. They were arrived at building up from the bottom—taking the various units and computing what it was considered should be the minimum number of officers assigned to such a unit.

Senator LENROOT. Does not the number of units depend on the number of men and the size of the Army?

Major BENEDICT. Yes, sir; the number of units is dependent upon the size of the Army and the units were determined from the enlisted strength, but there was no consideration of the number of officers.

Senator LENROOT. What was the personnel of the Army upon which the units were based?

Major BENEDICT. On a strength of 150,000.

Senator LENROOT. Was it not originally organized upon the basis of the maximum number the law allowed?

Major BENEDICT. Originally organized on the basis of 280,000. When the reduction to 150,000 was made we transferred a large number of units from an active to an inactive status. They still exist, their headquarters, their records, and everything exist, and they have another organization which is designated as a parent organization which takes care of all their records, property, etc., so the organization can readily be reconstituted.

Senator LENROOT. If we make a further reduction of 30,000, why should not the same thing be done on the new size of the Army as was done when it was reduced to 150,000?

Major BENEDICT. Well, sir, granting that it is done, I do not see where it would have much effect on the officer situation except to make up this 20 per cent shortage that now exists.

Senator LENROOT. There is a 20 per cent shortage now existing, but you are getting along with that shortage in those units?

Major BENEDICT. Yes, sir.

Senator LENROOT. If you are getting along with that shortage, it does not follow that it will have to be supplied if we reduce the Army.

Major BENEDICT. We are getting along. How well we will be prepared or ready for the legitimate purposes of the Army I do not know. But, of course, as the Secretary of War himself stated, the minimum with which the Army will get along is whatever Congress gives it.

Senator WADSWORTH. It depends on what you mean by getting along.

Major BENEDICT. Yes, sir; that is the point.

Senator HARRIS. Have you placed on the record the duties that the detached officers are now on?

Major BENEDICT. Deduct those 6,625 from the total we had in the Army and it shows 6,255 that are on what might be characterized as detached duties; that is, duties that have nothing to do with the enlisted strength of the Army.

Senator HARRIS. What I would like to know is just what those men are doing; that is, how many at the War College.

Senator WADSWORTH. General Harbord put in a table of that.

Major BENEDICT. I am inclined to think I have a copy of the same table he used. It was a computation that was made as of March 31.

Senator HARRIS. How many officers have you to a company to-day? You usually have a captain, first and second lieutenants. How many have you to-day? After taking out those men who are on detached service to-day, what is the average?

Major BENEDICT. I doubt very much if you will find any companies with more than two officers. A large number have only one. Of course, that would be a shortage of $33\frac{1}{3}$ per cent, assuming that the companies had two officers, but the total shortage for duty with troops

is not that great, because we have not the vacancies among the regimental and battalion commanders and staff officers that we have among company officers, so for the whole organization the shortage is about 20 per cent, but actually with the companies it will run much higher than that.

Senator LENROOT. That again is dependent upon the number of active units?

Major BENEDICT. Yes, sir. There is one thing that I would like to state while the committee is on the subject of the commissioned personnel; that is something in regard to this matter of percentages. Of course, in a large force we figure that for every million men you have got to have 50,000 officers. We take 5 per cent, and that gives us our requirement of 100,000 officers that we would have to have for a mobilization of 2,000,000. We now have about 71,000 reserve and National Guard officers. Those added to our regular officers leaves us short 16,000 officers for what we would need for a mobilization of 2,000,000.

Now, if you give us 13,000 officers, disregarding the younger men who will be practically untrained, your nucleus for a war army would be about 10 per cent; that is, in other words, 1 officer out of 10 would be an officer of experience and training. That is one thing worthy of consideration, I believe, in fixing an organization; that is, to have a nucleus for a war army.

When you get down to a smaller force that percentage rule can not be applied, and with our present Military Establishment I know of no percentage that can be applied. You might apply a 6 per cent rule to your organizations and say 6 per cent of the number of enlisted men should be assigned to duty with those, but there is no percentage that can be applied to the other things with which the Regular Army is charged, and I think it is just as true of the Medical Department and the chaplains as it is of the line of the Army. There is no suitable percentage for any branch under our system of organization, and I am inclined to think that the law should be amended in that respect.

Senator HARRIS. How are the other large countries of the world doing it? Do they have the same number of officers to a company or regiment that we have?

Major BENEDICT. I have looked up the statistics on a number of the armies and I find that in the majority of modern armies the number of officers for duty with the organization runs about 6 per cent. The only material departure that I found from that was in the German pre-war army, where it ran about 4.5 per cent. The tables of organization of all are quite similar now, and they are very similar among the allied forces.

Senator WADSWORTH. I suppose that was brought about by their common experiences in the war?

Major BENEDICT. Yes, sir.

On that subject of percentages, in the House bill they have written into the bill, for instance, of the officers carried on the promotion list there shall be in the grade of colonel 4 per cent, lieutenant colonel 4.5 per cent, majors 15 per cent, etc. The bill gives the percentages for each grade.

As I stated before, these percentages probably should be based upon two factors; one is the organizational needs and the other is the rate

of promotion. I would like to call attention here to the fact, for instance, that as the law now stands, a man in the Medical Department gets his promotion after a certain number of years' service. After three years he becomes—I have taken the Veterinary Corps as the branch of the Medical Department giving the best comparison—a first lieutenant, 7 years captain, 14 years major, 20 years lieutenant colonel, 26 years a colonel.

Now, it is reasonable to assume it was expected there would be some relation between promotion there and in the line.

Senator WADSWORTH. I think I can say that the committee that drew the act, after reviewing the history of the service for a good many years, figured that the rate of promotion prescribed for the Veterinary Corps represented the proper rate of promotion that should obtain in that line now.

Major BENEDICT. Well, I was going further than that.

Senator WADSWORTH. In other words, 26 years to colonelcy.

Major BENEDICT. I was going to assume we might give them two years the best of it owing to the fact they have a technical education. and on that basis in the line of the Army it should run 5, 9, 16, 22, 28 years for a colonelcy.

The best information obtainable—and this has been worked on for a long time and a great deal of statistics worked up on it—we are tending toward $4\frac{1}{2}$ years for a promotion to first lieutenant, 14 years promotion to captain, $24\frac{1}{2}$ years promotion to major, 34 years promotion to lieutenant colonel and 37 years to colonel. So that with the percentages as stated in the House bill, if those continue to apply to the Army, there is going to be a greater and greater disparity between the rates of promotion between the Medical Corps and the line of the Army to the disadvantage of the line of the Army.

Senator WADSWORTH. As a matter of fact, Major, any system of promotion which establishes the standard of 37 years to a colonelcy is close to the stagnation point.

Major BENEDICT. I think it absolutely is. While the Army got along before the war with slow promotion, I do not believe with the changed conditions in the world it could get along now. I can not conceive that a man who is qualified to be an Army officer and perform the duties and accept the increased responsibilities that are now falling to an officer of the Army would be content to stay in with any such rates of promotion as we had before the war.

Senator WADSWORTH. The effect on the service, too, regardless of the psychological effect on the men, is very marked. We would find if we had an emergency our Army was officered by men whose age was a handicap in the performance of duty.

Major BENEDICT. There is no question about that. The duties of a company officer, as developed by this war, are such that they require a good active man. As a matter of fact, a battalion commander should be a young and active man, and while there is probably a little less activity required of a regimental commander yet there is an immense physical and mental strain on him, and I can not conceive of officers of the ages we had before the war in the various grades functioning efficiently in any war organization.

Now, on that subject of percentages. Taking the organizational requirements into account we made quite a comprehensive study, as I said, last fall to find out what we needed, the total number of

officers, the number in branches, and the number in grades. The result of that was we had reasonable employment for a minimum of 5.4 per cent colonels, 8.6 per cent lieutenant colonels, 16.3 per cent majors, 26.3 per cent captains, 25 per cent first lieutenants, and 18.4 per cent second lieutenants, so that in the first three grades our organizational requirements showed a need for a greater number than the percentages now fixed by law. In the lower three grades the percentages required were somewhat less. So that either from an organizational or from a promotion standpoint these percentages are not thoroughly satisfactory, and as long as they have been brought up and introduced as a part of the bill I think it might be well for the committee to know something about these figures so those percentages will not become written into the law and be accepted as something that is thoroughly acceptable.

Senator LENROOT. The largest percentage is in the grade of captain.

Major BENEDICT. We have a greater percentage in the grades of captain and below than are necessary for the organizational requirements and a less percentage than are required in the upper grades.

In comparison with the naval percentages we find, for instance, they have 1 per cent flag officers, where we have four-tenths of 1 per cent general officers; they have 4 per cent captains, the same as our 4 per cent colonels; they have 7 per cent commanders as against our $4\frac{1}{2}$ per cent lieutenant colonels. In the grade of captain they have 32.5 per cent as against our 30 per cent.

Senator SPENCER. You mean the corresponding grade to captain—lieutenant?

Major BENEDICT. Yes. And the lieutenants junior grade and ensigns in the Navy are 41.5 per cent of the personnel, and with us 46.5 per cent. And that does not tell the whole story with regard to Navy rate of promotion, because they have a law which requires retirement of officers on obtaining a certain age in grade. If an officer becomes 55 and is still a captain, he is automatically retired; if he becomes 50 and is still a commander, he is automatically retired; if he becomes 45 and is still a lieutenant commander, he is automatically retired. We have nothing like that, and that still further augments their rate of promotion. So even if these percentages are increased they are not going to give the Army any greater flow of promotion than the Navy now has; any greater flow of promotion than we think we need; or any greater number of field officers than we actually have legitimate employment for.

Just a couple of things in connection with the bill in regard to its drafting. The bill provides a certain sum for the payment of officers of the line and staff; then this sum shall not be used for the pay of more than 11,000 commissioned officers. The bill then enumerates who these 11,000 are to be.

I see nothing in there in regard to officers of Philippine Scouts. In one place, after enumerating the various separate branches, it goes on and speaks of officers who belong to branches whose names are carried on the promotion list. Of course, at the present time the department has the names of Philippine Scout officers on the promotion list. The opinion of the Attorney General is that they are not properly there. If his opinion stands, it seems to me we have no provision for paying any Philippine Scout officers under this act.

Also, I can see nothing in the act that would enable us to pay the 50 emergency officers we still have under reconstruction in the general hospitals who, under the act of June 3, 1920, must be held in the service until they will not be benefited any further by further treatment.

And in the proviso of the act, for instance, it says the number of officers of the Dental Corps now authorized by law, 1 to every 1,000 officers and enlisted men in the Regular Army.

Well, that purports to be the same as existing law, whereas the law now says 1 for every 1,000 of the total authorized strength of the Regular Army. We have always heretofore computed the Corps of Cadets as part of the total strength of the Regular Army, so that does not exactly agree with existing law in that respect. I find also in line 21 it provides that professors at the Military Academy shall be part of this 11,000 and shall be paid out of the amount appropriated. Later in the Military Academy portion of the bill there is another appropriation for professors of the Military Academy which would indicate some confusion in the act.

In its provisions for elimination I would like to call attention to the fact that the bill states that officers with less than 10 years' commissioned service in the Regular Army may be discharged with a year's pay. That would not credit a man who is now in the Regular Army with any commissioned service that he might have had during the emergency.

As against that, if you go down to the next class, those of more than 10 years' commissioned service and less than 20 years' service may be placed on the unlimited retired list. It says nothing about the Regular Army service being the only service counted.

Then you go to the third class of those of more than 20 years' commissioned service that must be in the Regular Army.

So it struck me there was considerable confusion in the wording of the bill. Either service other than in the Regular Army should be counted for all officers or not counted for any.

I would like to state in connection with the bill which the War Department has proposed that it is a bill for a maximum of not more than 13,000 officers by the end of the fiscal year. By assuming that act to go through about the 1st of June, making reasonable assumptions as to the rate of elimination and the rate of new appointments, it would only be necessary to appropriate funds to pay an average of 12,531 officers for the year. While we would have authority to increase the commissioned strength to a maximum of 13,000 we would only be expending during the fiscal year the money to pay 12,531.

Senator LENROOT. Major, if the bill makes appropriation simply on the computation of the number of officers, of course you can come back for a deficiency if you have a greater number, and you would be permitted to have a greater number unless the limitation is placed in the bill itself in some form. In other words, it is necessary for us to work out a proposition in this bill embodying the War Department's policy or the House policy.

Major BENEDICT. Of course; the appropriation we are operating under this year provides enough money to pay 14,000 officers provided all the upper grades are kept full. The Army does not want

to go on in its present top-heavy condition. We would very much prefer instead of an amount to have some provision made for a readjustment to relieve the top-heavy condition.

Senator WADSWORTH. Under existing laws you can not help having a top-heavy condition.

Major BENEDICT. Absolutely not.

Senator LENROOT. We could, if we desired, put in the War Department bill as an amendment this proviso.

Senator WADSWORTH. By the way, Major, will you take the so-called War Department bill now pending before the Military Committee and draft another bill embodying the same principles but accomplishing the redistribution in grades on three bases: On the total number of officers, 11,000; total number, 12,000; and total number, 12,500?

Major BENEDICT. Yes, sir.

Senator WADSWORTH. That will give us four alternatives for our consideration.

Major BENEDICT. Yes, sir.

Senator WADSWORTH. I assume that will not be a tremendous task, will it?

Major BENEDICT. No, sir; I can do that in a very short time.

(Whereupon the committee recessed until 2.15 o'clock p. m.)

AFTERNOON SESSION.

The subcommittee reconvened, pursuant to the taking of the recess, at 2.30 o'clock p. m., Senator James W. Wadsworth presiding.

STATEMENT OF COL. F. B. FERGUSON, C. E., OFFICE OF THE ASSISTANT SECRETARY OF WAR.

Senator WADSWORTH. What items do you want to call attention to, Colonel?

OFFICE OF CHIEF OF ENGINEERS.

Colonel FERGUSON. The specific items are for clerical and office help in the offices of the supply branches. This is on page 49 of the House bill. It is on page 80 of the Budget. That is for the Chief of Engineers, the change being an addition of \$25,000.

Senator SPENCER. We have already had our attention called to that by the Chief of Engineers.

Colonel FERGUSON. I am from the office of the Assistant Secretary of War, who is in charge of the current procurement, and also of preparation or the supervision of preparation for procurement in case of war, and what I have to speak of is the reduction of personnel—that is, of the clerical force—on these particular items. Now, the first place they cut off when they begin reduction, is in some place for the preparation of plans, as the current work must proceed, and in this case the Chief of Engineers reports to the Secretary that if his help is cut down that much, he will not be able to do some work that he wishes done.

The next item is for the Signal Corps. It is a similar item.

OFFICE OF THE CHIEF SIGNAL OFFICER.

Senator WADSWORTH. On what page is that?

Colonel FERGUSON. On page 75 of the Budget; page 49 of the Senate bill.

Senator WADSWORTH. You have got all the figures on that, too, Colonel?

Colonel FERGUSON. Yes, sir.

Senator WADSWORTH. The two items are for the Chief of Engineers' office and for the office of the Chief Signal Officer?

Colonel FERGUSON. Yes.

Senator WADSWORTH. What other offices fall under this group?

Colonel FERGUSON. There would be the Chief of Ordnance and the Chief of the Air Service and the Surgeon General.

Senator WADSWORTH. Now, supposing that it is within your plan; tell us the importance of this work which is being done under the Assistant Secretary. It is a new function in our War Department machinery. It is really new business.

Colonel FERGUSON. Beginning with the law, the act of 1920 provides that the Assistant Secretary of War, under the direction of the Secretary of War, shall be charged with the supervision of the procurement of all military supplies and other business of the War Department pertaining thereto, and the assurance of adequate provision for the mobilization of material and industrial organizations essential to war-time needs.

The act further provides that there shall be details from the supply branches of the Army personnel, either officer or civilian, into the office of the Assistant Secretary of War. Now, under this act, 10 officers have been detailed from the supply branches. One is in charge of the procurement division, the current procurement being supervised by one officer, the remaining eight officers being in the planning section.

The task involved in planning for industrial mobilization is very great. During the recent war about 6,000,000 people were employed on work connected with furnishing war material for the Army, and the total of expenditures of about \$14,000,000,000 during the war, compared with our current expenditures, indicates the expansion that was required.

To get a start on this work, the computations of the requirements of the Army are being made in the supply branches. Pending the receipt of these computed requirements, steps have been taken to make sure that the various branches are ready to meet any probable demand. That is, there is a general scheme for expanding the office of the Assistant Secretary, and for expending the procurement agencies in each of the supply branches, both their offices in Washington and in the field. Each office has such a general scheme.

Some progress is being made in the listing and assigning of reserve officers and regular officers.

The Assistant Secretary has requested, and his request was complied with, that a board of officers consider the war-time contracts. Such board has been meeting once or twice a week for several months, and at the request of the Secretary each chief of a supply branch has designated several regular officers to make studies in addition

to their other duties of procurement problems, and submit professional papers on them. About 500 officers are now at work on such papers. Some reserve officers have agreed to do similar work.

The general idea is, for the various kinds of supplies, the task must be subdivided before it can be accomplished. The law subdivides it into different headings by the designation of the various supply departments. Each supply department divides up its task, the quartermaster having, of course, the greatest variety.

The idea is that to each of these groups of similar classes of supply, several regular officers will be assigned, keeping in touch with it and studying it constantly, and for the same group there will be several reserve officers who are willing to assist in this work. That will keep the whole idea alive, using the experience of the regular officers who were in the Army, and of the reserve officers who had experience in the war; and as the younger men come on, the whole idea will keep on a sound basis.

Now, as these officers show their capacity, they will be assigned in the skeletonized war procuring agencies; and they, working together with the advice of civilians in industry, will be able to complete the necessary detailed plans.

As these plans develop, the critical features will become known and a decision can be made; the advice of men of great experience in business and industry being obtained on questions of great importance.

It is apparent that the amount of work involved is so great that but little progress could be made with a few regular officers, except for the voluntary assistance that is offered by reserve officers and other patriotic citizens. In order that this assistance can be utilized to advantage it is necessary that a few Regular officers devote their entire time to this work.

That outline gives the general idea that is in mind.

Senator WADSWORTH. The emphasis you place is upon the clerical assistance in the various offices of these supply branches?

Colonel FERGUSON. Yes; and a few officers to keep alive the idea.

Senator WADSWORTH. Do you contend, or does the Secretary, that the bill that passed the House would deprive you entirely of that assistance?

Colonel FERGUSON. Not entirely, no, sir; but they say that they will be very much cramped, and I think that we would be among the first to suffer, because the current work must proceed, of course.

Senator WADSWORTH. Will you state again what offices you have reference to, that the bill, according to you, injures?

Colonel FERGUSON. The clerical force of the Signal Corps on the statutory roll, the Surgeon General, the Engineer Corps, the Ordnance, and the Air Service all have their office force cut below the Budget recommendation; and if it was raised to that amount, our work would proceed. They made recommendations considerably higher than that to us, to carry out what they wish, and we cut the amounts; that is all we feel justified in mentioning.

Senator WADSWORTH. Would the work be seriously handicapped this next year if the House bill stood?

Colonel FERGUSON. I think so, sir. The Engineer Corps I happen to know more about. It is badly cramped on that one item. We

have taken two of their clerks away, and they seem to think that they simply could not do the work with the money allowed.

Senator WADSWORTH. What is your own assignment now?

Colonel FERGUSON. I am assigned to the office of the Assistant Secretary of War, and have been designated as director of procurement, head of the procurement division in his office; the other divisions being the claims division and the current and miscellaneous division.

Senator WADSWORTH. Have you made much progress thus far in planning out industrial mobilization?

Colonel FERGUSON. We have made a start. The first thing, of course, is to find out what we want by the computation of the requirements. The branches are now at work on that. It is a tremendous task. There are about 75 general classes of supplies, and of the major items, as they call them—something like 23,000. That includes machine guns and airplanes and other items, all not exactly the same basis.

The total of the minor items runs up to about 700,000. Somebody has to figure out how many we want of those in the beginning, and the branches are working on that, and in the meantime we have to find out as to the possibility of obtaining those items; that is, get information of the resources of the country analyzed in some sort of shape, so that you can have a pretty good idea of meeting the requirements. We are doing that in the Assistant Secretary's office, and these 500 regular officers that are studying those problems study from both points of view; that is, going clear through from where an item originates to the use that it has in war.

Senator WADSWORTH. You have 500 regular officers that work on this only?

Colonel FERGUSON. No, sir; that work is in addition to their other duties. They just do this at odd times, like many of us have for many years, kept up some study as a side issue; and some of the results are pretty good and some are not so good. But that is entirely in addition to any routine work that they are doing. We feel that a few men should be put solely on that work with the others, so as to get the best results; and the 10 officers in our office now to try to supervise this, and at least get it started.

There are about 6,000 reserve officers that are in what they call a branch assignment; that is, they are not assigned to the local duties in a corps area. These officers are available for the war organization of the procurement duties of the various branches. Perhaps half of them would be assigned to duty coming almost directly under the Secretary's supervision. It is necessary, if we keep up the interest of those men, that in some way we write back and forth and work on the plans together, and that a few officers of the Regular Army should put in their whole time thinking about the plan involved, and in that way we hope to keep alive the interest and be able to start in case of war without wasting any time.

We estimated that in the start of the last war six months was lost—Mr. Crowell estimated that—simply because we did not know how to start. Now, of course, the details of those plans vary in different cases. Take the airplane and the various elements that enter into it. I think there are 200 parts. There is an immense amount of work

that must be done in the way of clerical work, work that junior officers can do.

Senator WADSWORTH. How many years do you think it will take to get abreast of the science?

Colonel FERGUSON. Well, of course, we think that within a year we will have something that you could call a general plan. That is, we would have our central office here, all our field offices specified, and their organizations, and the men selected for each major task under those organizations, and would have detailed plans for some of the more important items.

We have laid out our scheme of keeping track of it, and within a year we would perhaps have that general task worked out.

The ordnance have their scheme. The quartermaster has made a good deal of progress in getting their scheme in shape. But to get a real plan for all of 23,000 major items will take longer; and, of course, we have not in mind that a piece of paper with an approval plan on it is of any very enormous value compared with the keeping alive of the idea and being sure that in 10 to 15 years from now we have a kind of an organization throughout the country where real thinking men are studying about what they might have to do in case of war and are ready to work together and keep their plan up to date for us. We must rely upon their judgment, of course. But as a starting point we must have a plan outlined, so that men can be given places in the organization and constantly tested out for them.

Senator WADSWORTH. Does anyone desire to ask any questions of Colonel Ferguson? If not, have you anything else to ask, Colonel?

Colonel FERGUSON. No, sir.

Senator WADSWORTH. Thank you very much.

MILITARY INTELLIGENCE DIVISION.

(The following information was presented for the consideration of the subcommittee:)

ESTIMATE OF APPROPRIATIONS REQUIRED FOR THE SERVICE FOR THE FISCAL YEAR 1923.

CONTINGENCIES, MILITARY INTELLIGENCE DIVISION, GENERAL STAFF.

For contingent expenses of the Military Intelligence Division, General Staff Corps, including the purchase of law books, professional books of reference; subscription to newspapers and periodicals; drafting, clerical, and messenger services in the Military Intelligence Division in Washington, District of Columbia; and of the military attachés at the United States embassies and legations abroad and rental of offices for such military attachés; the cost of special instruction at home and abroad, and in maintenance of students and attachés; for the hire of interpreters, special agents, and guides and for such other purposes as the Secretary of War may deem proper, including \$10,000 for the actual and necessary expenses of officers of the Army on duty abroad for the purpose of observing operations of armies of foreign States at war, to be paid upon certificates of the Secretary of War that the expenditures were necessary for obtaining military information, * * * \$225,000; to be expended under the direction of the Secretary of War: *Provided*, That section 3648, Revised Statutes, shall not apply to subscriptions for foreign and professional newspapers and periodicals to be paid for from this appropriation. (Acts August 6, 1894, vol. 28, p. 243, sec. 1; June 30, 1921, vol. 42, p. 69, sec. 1.)

ANALYSIS ESTIMATE OF APPROPRIATION "CONTINGENCIES, MILITARY INTELLIGENCE DIVISION, GENERAL STAFF," FISCAL YEAR 1923.

The estimate submitted by the Budget officer for this appropriation for the fiscal year 1923 is \$225,000, and although this amount lacks by \$85,000 what is considered the minimum necessary for an adequate service, it is the same amount that was appropriated by Congress for the fiscal year 1922, and if again appropriated for the fiscal year 1923 will be expended for the following specific purposes:

- (a) Payment of clerks, stenographers, draftsmen, research clerks, photographers, translators, and messengers ----- \$128,840

This item includes the civilian personnel required for properly conducting the work of the division and it is intended to cover the salaries of approximately 91 individuals, specifically as follows:

1 chief clerk, at \$2,000-----	\$2,000
4 translators, at \$1,800-----	7,200
4 translators, at \$1,600-----	6,400
1 stenographer, at \$1,600-----	1,600
1 research clerk, at \$1,600-----	1,600
1 draftsman, at \$1,600-----	1,600
1 clerk, chief records, at \$1,600-----	1,600
2 stenographers, at \$1,400-----	2,800
1 draftsman, at \$1,400-----	1,400
2 research clerks, at \$1,400-----	2,800
6 clerks and typists, at \$1,400-----	8,400
1 research clerk, at \$1,300-----	1,300
2 stenographers, at \$1,300-----	2,600
6 research clerks, at \$1,200-----	7,200
18 stenographers, at \$1,200-----	21,600
31 clerks and typists, at \$1,200-----	37,200
1 mimeograph operator, at \$1,200-----	1,200
1 photostat operator, at \$900-----	900
2 laborers, at \$900-----	1,800
1 messenger, at \$720-----	720
4 messengers, at \$480-----	1,920

91 Total ----- 113,840

(1) Many of our present personnel, especially the translators who do work for the War Department at large, and research clerks, are indeed specialized and are trained specifically for this class of work. It would be a serious matter to lose the services of these trusted and qualified people who combine both character and intelligence and are, for this reason and for the further reason that they are specially trained in their work, difficult to replace.

(2) In addition to the foregoing personnel, this division in the past has made use of the following personnel of the statutory roll of the General Staff, which are, with the exception of one clerk, technical people employed in the map section, viz:

1 chief draftsman, at \$2,000-----	\$2,000
1 photographer, at \$2,000-----	2,000
1 photographer, at \$1,800-----	1,800
2 draftsmen, at \$1,800-----	3,600
2 draftsmen, at \$1,600-----	3,200
1 draftsman, at \$1,200-----	1,200
1 clerk, at \$1,200-----	1,200

9 Total ----- 15,000

91 civilian personnel ----- 113,840

100 Grand total ----- 128,840

As the result of a ruling of the Judge Advocate General and the Chief of Finance that all clerical personnel in this division on duty in Washington must be paid out of a single appropriation (which is especially provided for by the language of this bill under consideration), it has been necessary to consider this last enumerated personnel with a pay roll amounting to \$15,000 in the item of clerical hire for the next fiscal year. The total amount for the hire of personnel named above is approximately \$11,400 less than for the fiscal year 1922.

(b) The hire of agents, guides, and interpreters..... \$6,300

This item is intended to cover the necessary expenses incurred by agents, guides, and interpreters in obtaining special information in foreign countries and on the border of the United States when the occasion arises.

This amount will be approximately allocated as follows: Eighth Corps Area, Philippine Department, Hawaiian Department, and Panama Department, each \$1,000; balance to the offices of our 23 military attachés.

(c) Professional books of reference, purchase of; subscription to newspapers and periodicals..... \$2,000

Many books are needed in the division and by its military attachés abroad in the preparation of our monographs on the countries of the world, which monographs are written for each country, are kept up to date, and contain military and other information necessary both in the preparation of war plans and their execution. Since the war many such books are being continually written throughout the world and which contain information of inestimable value. It is intended that 250 books at an average cost of \$4 each will be purchased.

As a fruitful source of information is found in newspaper articles after proper study and analysis, it is necessary that the division be supplied with the leading newspapers in this country and abroad in order to keep up with current events and the general situations throughout the world. It is intended that our 23 military attaché-officers will be each allotted \$18 for this purpose, or a total of \$414; the balance of \$586 will be spent for subscriptions to newspapers in the United States, based on 58 newspapers at an annual subscription of about \$10 each.

(d) General office supplies, including postage and registry stamps..... \$1,100

General office supplies will include only such articles as are necessary and not furnished by the supply department, the cost being estimated at \$400.

During the last year a great deal of courier service between this country and our various foreign embassies and legations has been discontinued, thus necessitating postage and registry stamps in order to insure the safe transmission of correspondence. It is estimated that \$700 will be required for this service.

(e) Supplies, photographic, photostatic, and drafting..... \$900

Of the above amount, \$750 is required for the purchase of supplies for photographic and photostatic work and is necessary in order that maps, photographs, etc., may be reproduced quickly.

As it is essential that information collected be recorded in such a manner as to be immediately available for military use, it is necessary to provide the required drafting supplies for the preparation and mounting of maps, the preparation of tracings, index maps, and graphic charts, for which it is estimated \$150 will be expended.

(f) Printing, bookbinding, reproduction and purchase of maps..... \$9,600

The printing and binding of index books, reports, summaries, and such other publications that this division prepares is performed at the Government Printing Office and charged against this item. It is estimated that funds necessary for this purpose will be \$1,000.

Various maps must be purchased and reproduced in order that this division may meet its responsibilities of furnishing the initial supply of maps necessary for staff duties. To meet these requirements it is estimated that \$8,600 will be needed and expended in the following manner:

Lithographing, including plates and actual printing.....	\$3,000
Purchase of maps abroad.....	400
Purchase of maps in the United States.....	200
Transliteration of maps.....	1,000
Revision of maps.....	4,000

Total 8,600

(g) Tuition and textbooks necessary in the instruction of language officers..... \$5,760

It has been the policy of the division to detail four officers per year for a 4-year course in the study of the Japanese and Chinese languages, two officers

being sent to these countries, each year to study each of the languages in question. In the fiscal year 1923 this policy will have been in effect four years and thus 16 officers will then be undergoing instruction.

Therefore, this item covers the necessary tuition and the cost of textbooks, etc., for eight officers in Japan and eight officers in China, estimated at \$30 per month per person.

(h) Rental of military attachés' offices..... \$13,000

There are functioning under the division about 23 offices of military attachés located in various foreign countries. To provide for office rent for these offices, this item is necessary. During the last year our military attaché offices have been placed in the same building as the various embassies in every case in which it was possible to do so, but, even so, this office rent is a fixed charge and we have to pay for the rent of same whether the offices are in the embassy building or separate, as the War Department has to pay its pro rata share of rent for embassy buildings. This amount will provide for an average yearly rental of approximately \$565 to each of our attaché offices.

(i) Extraordinary expenses of military attachés..... \$28,200

This item is based on a military attaché establishment consisting of 23 offices represented by 34 officers and 6 attached air officers doing special work for the Air Service. These officers cover 48 foreign countries, either by actual residence in the capitals of these countries or by periodic visits to them.

When a military attaché arrives in a foreign country and during his sojourn there he is very often entertained by his foreign associates, not as an individual, but as an official representative of the United States. Our attachés are thereby bound to officially return such entertainments if they are to make themselves acceptable to the foreign officials in question, establish friendly relations, and thereby obtain military information. Such entertainment given is official in character and would not have to occur except for the fact of the officer's official position as military attaché. The amount requested provides for an average of about \$1,200 to each office during the year.

(j) Actual and necessary expenses of officers abroad in observing the operations of foreign armies at war..... \$5,000

This amount is required for the actual and necessary expenses of officers of the Army on duty abroad for the purpose of observing the operations of armies of foreign States at war, to be paid upon certificate from the Secretary of War that the expenditures were necessary for obtaining information.

This item is necessary in order that funds may be available for sending, on a moment's notice, any suitable and available officer to observe the armies of foreign States actually at war.

(k) Expenses incurred in interviewing individuals..... \$300

Much valuable information is obtained from individuals who have lived abroad for a considerable time either in an official or nonofficial capacity and are informed concerning the situation in countries wherein they have resided. This is a valuable source by which we are enabled to verify information received from other sources.

Many of these persons have the means and are willing to travel at their own expense, but others can not afford such a trip, and thus it is intended to cover, in a small way, the necessary funds for their expenses.

(l) Maintenance of intelligence work in corps areas and departments... \$14,000

This item is intended to cover certain necessary expenses incurred in the maintenance of the intelligence sections of the staffs of the nine corps areas within the United States and the three departments in the Philippine Islands, Hawaii, and Panama.

The expenses incurred in the maintenance of the intelligence sections, above referred to, are for items similar to those already noted in connection with the maintenance of the Military Intelligence Division, General Staff, except, of course, on a very much smaller scale. It includes such items, particularly in our outlying possessions, as purchase of books, subscriptions to newspapers and periodicals, drafting and photographic supplies, maps, and other necessary expenses in connection with the collection, collation, and dissemination of military information within the corps areas and departments.

(m) Code and cipher work..... \$10,000

(Thereupon, at 3 o'clock, the subcommittee adjourned.)

Civilian employees, fiscal year 1923 (March 20, 1922).

Appropriation.	Revised estimate, 132,000 men.				Revised estimate, 156,000 men.			
	Salaries.	Wages.	Number employees.	Total cost.	Salaries.	Wages.	Number employees.	Total cost.
Regular supplies of the Army.....	17,056	832,944	831	850,000	17,056	914,944	912	932,000
Incidental expenses of the Army.....	2,113,088	2,444,028	5,571	4,557,096	2,113,088	2,444,028	5,571	4,557,096
Army transportation:								
Animal.....	26,300	496,200	532	522,500	26,300	496,200	532	522,500
Motor.....	124,715	636,795	574	761,510	124,715	736,795	574	761,510
Water.....	275,415	1,434,787	1,363	1,710,202	300,000	1,710,202	1,363	1,710,202
Rail.....	220,617	673,127	710	893,744	220,617	673,127	710	893,744
Total.....	647,047	3,240,909	3,179	3,887,956	671,632	3,616,324	3,179	3,887,956
Water and sewers.....	85,313	764,687	566	850,000	85,313	764,687	566	850,000
Clothing and equipage.....	217,700	1,482,300	2,100	1,700,000	217,700	1,482,300	2,100	1,700,000
Barracks and quarters.....	595,679	504,321	798	1,100,000	595,679	654,321	907	1,250,000
Roads, walks, wharves, and drainage.....	8,435	341,565	456	350,000	8,435	191,565	261	200,000
Barracks and quarters, P. I.....		68,120	98	68,120		68,120	98	68,120
Grand total.....	3,664,298	9,679,874	13,569	13,363,172	3,708,893	10,136,289	13,564	13,445,172

	Number.	Compensation.
Employees, Dec. 31, 1921.....	19,644	\$20,624,000
Employees, Feb. 28, 1922.....	16,701	16,529,958
Total.....	2,943	4,094,042
Employees, Feb. 28, 1922.....	16,701	16,529,958
Estimate, 1923.....	13,564	13,445,172
Total.....	3,107	3,084,786
Employees, Dec. 31, 1921.....	19,644	20,624,000
Estimate, 1923.....	13,564	13,445,172
Total.....	6,050	7,178,828

Estimates for fiscal year 1923.

SUBSISTENCE OF THE ARMY.

Name of item.	Obligated to Mar. 11, 1922.	Amount printed in Budget.	Revised estimate submitted at House hearings.	Passed by Congress.	Estimate for 132,000 men Mar. 20, 1922.	Revised estimate for 156,000 men Mar. 20, 1922.
Rations for troops, warrant officers of the Mine Planter Service, enlisted men of the Enlisted Reserve Corps, and retired enlisted men when ordered to active duty, civilian employees when entitled thereto, hospital matrons, nurses, applicants for enlistment while under observation; general prisoners of war, including Indians held by the Army as prisoners, but for whose subsistence appropriation is not otherwise made; Indians employed as guides and scouts, and general prisoners at posts, masters, officers, crews, and employees of the vessels of the Army.....	\$19,528,434	\$13,216,964	\$19,543,100		\$14,202,670	\$15,581,781

Estimates for fiscal year 1923—Continued.

SUBSISTENCE OF THE ARMY—Continued.

Name of item.	Obligated to Mar. 11, 1922.	Amount printed in Budget.	Revised estimate submitted at House hearings.	Passed by Congress.	Estimate for 1923 for 132,000 men Mar. 20, 1922.	Revised estimate for 156,000 men Mar. 20, 1922.
Commutation of rations or meals, including hot coffee, for all persons entitled thereto, except for cadets of the Military Academy.....	\$4,400,000	\$4,250,020	\$3,000,000	.....	\$2,400,163	\$2,646,513
Commutation of rations for cadets of the United States Military Academy.....	494,668	472,339	336,000	.....	366,000	366,000
Prizes for school graduates.....		900	900	.....	900	900
Expenses incident to the purchase, testing, care, preservation, issue, sale, and accounting for subsistence supplies, including customs duties, and advertising.....	106,801	89,553	90,000	.....	90,000	90,000
Other expenditures.....	1,728,120			.....	
Total.....	26,258,113	18,029,776	23,000,000	16,550,000	17,056,733	18,685,194

SUBSISTENCE, AT 30 CENTS PER RATION, FOR 156,000 MEN.

Name of item.	Amount.	Remarks.
Rations for troops, including Philippine Scouts.....	\$14,902,361	\$14,902,361 will feed 136,100 men for 365 days at 30 cents; 146,822 men at 30 cents would cost \$16,077,009 or \$1,174,648 additional.
Rations for members of the Enlisted Reserve Corps on active duty.....	45,000	10,000 men for 15 days at 30 cents.
Rations for flying cadets.....	87,052	318 at \$0.75.
Subsistence of masters, officers, crews, and employees of the vessels of the Army Transport Service.....	218,868	61 at \$1 per day; 109 at 75 cents per day; 30 at 55 cents per day.
Rations for general prisoners.....	328,500	3,000 for 365 days at 30 cents.
Total.....	15,581,781	
Hot coffee for troops traveling.....	15,472	157 men per day at 27 cents (one-tenth of 1 per cent).
Meals for recruiting parties.....	547,500	1,000 men per day at \$1.50.
Meals for applicants for enlistment.....	211,887	94,172 applicants for 1½ days at \$1.50.
Meals for competitors at the National Rifle Match.....	12,000	800 men for 10 days at \$1.50.
Commutation of rations:		
Enlisted men traveling or detached.....	779,640	157 men, at \$1.20 (value of 4 rations), \$38.76
Nurses detached.....	14,965	2,164 men, at \$0.90 (value 3 rations), \$710.51
Warrant officers of the Mine Planter Service.....	27,375	41 for 365 days, at \$1.
Members of the Enlisted Reserve Corps traveling to and from active duty.....	22,500	100 for 365 days, at \$0.75.
Nurses, including student nurses, on duty in hospitals.....	145,744	10,000 men for 1½ days, at \$1.50.
Men sick in hospitals.....	869,430	214, at 80 cents (ration 100 per cent), \$46.88
		645, at 42 cents (ration + 40 per cent), \$28.55
		(709 + 150 = 859).
		470, at 60 cents (ration + 100 per cent), \$102.30
		5,000, at 42 cents (ration + 40 per cent), \$766,500.
Total.....	2,646,513	
Commutation of rations for the cadets, United States Military Academy.....	366,000	1,338 for 365 days, at 75 cents.
Prizes for school graduates.....	900	
Other necessary expenses incident to the purchase, testing, care, preservation, issue, and accounting for subsistence stores, including customs duties and advertising.....	90,000	
Grand total.....	18,685,194	
Strength.....		156,000
Commutation.....		9,172
Rations in kind.....		146,822

Estimates for fiscal year 1923—Continued.

SUBSISTENCE, AT 30 CENTS PER RATION, FOR 156,000 MEN—Continued.

Name of item.	Amount.	Remarks.
Commutation for 365 days:		
Recruiting parties (men).....		1,000
Applicants for enlistment (men).....		387
Traveling or detached (men).....		2,321
Sick in hospital (men).....		5,470
Total.....		9,178
Traveling or detached:		
Men traveling, detached.....		157
Men on detached duty—		
Organized reserves.....		252
Reserve Officers Training Corps.....		1,200
National Guard.....		450
Miscellaneous.....		282
		2,321

SUBSISTENCE FOR 125,000 MEN PLUS 7,000 PHILIPPINE SCOUTS.

Name of item.	Amount.	Remarks.
Rations for troops, including Philippine Scouts.....	\$13,523,250	123,500 men for 365 days at 30 cents.
Rations for members of the Enlisted Reserve Corps on active duty.....	45,000	10,000 men for 15 days at 30 cents.
Rations for flying cadets.....	87,082	318 at 75 cents.
Subsistence of masters, officers, crews and employees of the Army Transport Service.....	218,968	61 at \$1 per day; 109 at 75 cents per day; 830 at 55 cents per day.
Rations for general prisoners.....	328,500	3,000 for 365 days at 30 cents.
Total.....	14,202,670	
Hot coffee for troops traveling.....	13,000	132 men per day at 27 cents (0.1 of 1 per cent).
Meals for recruiting parties.....	438,000	800 men per day, at \$1.50.
Meals for applicants for enlistment.....	211,887	97,172 men for 1½ days, at \$1.50.
Meals for competitors at the national rifle match.....	12,000	800 men for 10 days, at \$1.50.
Commutation of rations:		
Enlisted men traveling or detached.....	768,690	132 men, at \$1.20 (value 4 rations), \$57,816; 2,164 men, at \$0.90 (value 3 rations), \$710,874.
Nurses detached.....	14,965	41, at \$1.
Warrant officers of the Mine Planter Service.....	27,375	100, at 75 cents.
Members of the enlisted Reserve Corps traveling to and from active duty.....	22,500	10,000 men for 1½ days, at \$1.50.
Nurses, including student nurses on duty in hospitals.....	130,502	192, at 60 cents (rations+100 per cent), \$42,048; 577, at 42 cents (ration+40 per cent), \$88,454; (619+150=769).
Men sick in hospitals.....	761,244	396 (0.3 of 1 per cent), at 60 cents (ration+100 per cent), \$86,724; 4,621 (3½ per cent), at 12 cents (ration+40 per cent), \$674,520.
Total.....	2,400,163	
Commutation of rations for the cadets, United States Military Academy.....	366,000	1,338, at 75 cents.
Prizes for school graduates.....	900	
Other necessary expenses incident to the purchase, testing, care, preservation, issue and accounting for subsistence stores, including customs duties and advertising.....	90,000	
Grand total.....	17,059,733	
Strength (125,000+7,000).....		132,000
Deduct for drawing commutation.....		8,500
Rations in kind.....		123,500

Estimates for fiscal year 1923—Continued.

SUBSISTENCE FOR 125,000 MEN PLUS 7,000 PHILIPPINE SCOUTS—Continued.

Name of item.	Amount.	Remarks.
Commutation:		
Recruiting parties.....		12 1/2
Applicants for enlistment.....		2 1/2
Travelling or detached.....		5 1/2
Sick in hospital.....		1 1/2
		<u>21 1/2</u>
Travelling or detached:		
Men travelling.....		12
Men on detached duty—		
Organized Reserves.....		1 1/2
Reserve Officers Training Corps.....		1 1/2
National Guard.....		1 1/2
Miscellaneous.....		1 1/2
		<u>5 1/2</u>
Total.....		<u>26 1/2</u>

REGULAR SUPPLIES.

Name of item.	Amount obligated to Mar. 11, 1922.	Amount included in Budget for 156,000 men.	Revised estimate submitted at House hearings for 156,000 men.	Amount passed by House.	Estimate Mar. 20 for 132,000 men.	Revised estimate Mar. 20 for 156,000 men.
Care and protection of regular supplies.....	\$99,164	\$170,867	\$170,867		\$100,000	\$115,000
Reservation fences:						
Construction of.....	257					
Maintenance and repair.....	651	15,000	15,000		10,000	15,000
Heating stoves and parts thereof.....	7,023	18,368	18,368		8,000	12,000
Heating apparatus (other than stoves):						
Installation of, in offices, hospitals, barracks, quarters, and recruiting stations and United States disciplinary barracks.....	6,325					
Maintenance and repair, in offices, hospitals, barracks, quarters, and recruiting stations, and United States disciplinary barracks.....	167,567	250,000	250,000	\$225,000	200,000	250,000
Ranges and cooking stoves and parts thereof.....	18,824	124,428	124,428		30,000	45,000
Coffee roasters, purchase and maintenance.....		296	296		200	296
Appliances for cooking and serving food, purchase and maintenance.....	15,848	16,701	16,701		15,000	15,000
Field ranges, purchase and maintenance.....	5,625	4,740	4,740		5,000	5,000
Rolling kitchens, purchase and maintenance.....	4,110	8,887	8,887		4,000	4,000
Candles and matches.....	3,794	27,730				
power, heat, electric current for light, and electric current for moving-picture machines, purchase of.....	1,411,805	1,400,000	1,400,000	1,250,000	1,300,000	1,400,000
Electric wiring and fixtures in structures other than hospitals:						
Installation of.....	9,313					
Maintenance and repair.....	143,778	200,000	200,000	175,000	100,000	200,000
Incandescent lamps, parts and supplies.....	11,297	100,000	100,000		65,000	100,000
Oil lamps and lanterns, including illuminating supplies therefor.....	41,399	74,064	74,064		40,000	50,000

Estimates for fiscal year 1923—Continued.

REGULAR SUPPLIES—Continued.

Name of item.	Amount obligated to Mar. 11, 1922.	Amount included in Budget for 155,000 men.	Revised estimate submitted at House hearings for 155,000 men.	Amount passed by House.	Estimate Mar. 20 for 132,000 men.	Revised estimate Mar. 20 for 155,000 men.
Fuel in kind, for cooking and for heating offices, barracks, quarters, storehouses, recruiting stations, and other buildings when authorized; for operation of lighting plants, laundries, modern batteries.....	\$3,925,171	\$3,599,798	\$3,599,798	\$3,000,000	\$3,775,000	\$3,800,000
Appliances for handling and preparation of fuel.....	7,565	22,219	22,219	.....	7,000	10,000
Engine supplies for modern batteries, lighting plants, and ice plants.....	128,230	62,333	62,333	.....	100,000	120,000
Post bakeries, maintenance and repair of buildings.....	1,012	10,000	10,000	.....	6,500	10,000
Bake ovens and apparatus, purchase and maintenance.....	13,915	25,774	25,774	.....	13,000	15,000
Ice plants, maintenance and repair of buildings, including operation thereof.....	64,640	20,000	20,000	.....	50,000	50,000
Ice, for issue to offices, organizations, and for preservation of stores.....	280,912	178,682	178,682	175,000	207,000	225,000
Laundries:						
Construction of buildings, including installation of machinery.....	20,000	.....	.....	.....	.....	.....
Maintenance and repair of buildings, including repair of machinery.....	34,675	56,973	56,973	57,000	40,000	57,000
Soap, issue.....	6,105	87,159	87,159	.....	25,000	30,557
Toilet paper, towels, and paper drinking cups for issue to offices.....	10,475	49,119	.....	.....	.....	.....
Furniture, textbooks, and equipment for post schools and libraries and schools for noncommissioned officers; and instruments, furniture, stationery, and other authorized articles for officers' schools.....	1,856	4,444	4,444	.....	1,800	2,500
Commercial newspapers, relief maps, market reports.....	375	1,778	1,778	.....	500	500
Newspapers and periodicals.....	2,706	.....	.....	.....	.....	.....
Mass furniture, tableware, commissary chests, issue outfits.....	16,618	56,882	56,882	.....	15,000	18,500
Forage, including salt and vinegar, and bedding for animals and straw for soldiers' bedding.....	4,985,983	4,475,553	5,619,647	4,000,000	4,900,000	5,619,647
Implements, seeds, labor, and other expenses, for raising forage at remount depots and on military reservations in Hawaii and Philippine Islands.....	26,545	36,884	36,884	.....	28,000	36,000
Stationery, including blank books and blank forms for all branches of the Military Establishment except Ordnance Department, Medical Department, Engineer Corps, and those bureaus and departments whose appropriation specifically provide therefor.....	36,763	125,021	125,021	125,000	100,000	125,000
Typewriters, exchange and repair of.....	8,049	20,738	20,738	15,000	10,000	15,000
Printing, including certificates for discharged soldiers.....	66,450	192,568	192,568	.....	175,000	192,000
Civilian employees, construction service (utilities) in connection with heating and lighting.....	953,888	932,000	932,000	850,000	850,000	932,000

Estimates for fiscal year 1923—Continued.

REGULAR SUPPLIES—Continued.

Name of Item.	Amount obligated to Mar. 11, 1922.	Amount included in Budget for 155,000 men.	Revised estimate submitted at House hearings for 155,000 men.	Amount passed by House.	Estimate Mar. 20 for 132,000 men.	Revised estimate Mar. 20 for 155,000 men.
Office furniture and filing equipment.....	\$23,635	\$36,914	\$36,914	.....	\$20,000	\$23,000
Picket rope, shoeing of horses and mules, and for blacksmiths' tools, and farriers' tools, for issue to organizations.....	16,921	33,082	33,082	.....	17,000	20,000
Tools, carpenters' and saddlers' sets, for issue to organizations.....	212	17,004	17,004	.....	1,000	1,000
Gasoline and lubricants, for operation of tanks and tractors.....	211,104	171,641	171,641	.....	200,000	218,000
Cleaning and preserving materials (transferred from Ordnance to Purchase and Storage Service, by P. S. & T. Supply Circular No. 29, as amended by No. 48, series 1919).....	122,930	105,653	105,653	.....	100,000	115,000
Removal of garbage.....	18,141	38,496	38,496	.....	18,000	22,000
Fuel and light for civilian military training camps.....	13,800	71,102	71,102	.....	15,000	24,800
Cold storage (expended, \$115,000).....	.....	88,877	88,877	.....	95,000	105,000
Reserve Corps on active duty 15 days.....	.....	.....	.....	.....	43,000	.....
All other items.....	.....	.....	.....	\$1,060,000	.....	.....
Total.....	12,975,695	12,932,755	14,000,000	10,932,000	12,750,000	14,000,000

CLOTHING AND EQUIPAGE FOR 123,000 MEN PLUS 7,000 PHILIPPINE SCOUTS.

Salaries and wages.....	\$1,337,658	\$1,959,080	\$1,700,000	.....	\$1,700,000	\$1,700,000
Clothing and enlisted men, including raw materials for the manufacture of same.....	2,969,354	3,867,135	2,439,579	.....	2,067,135	2,439,579
Clothing for warrant officers of the mine-planter service, including raw materials for the manufacture of same.....	15,300	11,285	11,285	.....	11,285	11,285
Clothing for Army nurses, including raw materials for the manufacture of same.....	25,000	23,064	18,000	.....	18,000	18,000
Clothing, citizens' outer clothing to cost not exceeding \$30, to be issued to soldiers discharged otherwise than honorably.....	74,630	51,733	51,733	.....	51,733	51,733
Altering, fitting, cleaning, and repairing clothing, including purchase of tools, machines, findings, etc.....	175,000	447,767	200,000	.....	200,000	200,000
Operation of laundries, including laundry work performed under contract.....	300,000	2,230,193	350,000	.....	350,000	350,000
Toilet articles, barbers' and tailors' materials, including housewives and toilet kits.....	1,540	1,847	1,847	.....	1,847	1,847
Textile equipment, such as tents, paulins, bed sheets, pillowcases, mattress covers, etc., including raw materials for manufacture of same.....	7,030	409,227	10,000	.....	10,000	10,000
Personal equipment, including materials for the manufacture of same.....	3,615	44,289	10,000	.....	10,000	10,000
Miscellaneous articles of equipment not otherwise provided for.....	77,072	286,076	100,000	.....	100,000	100,000

Estimates for fiscal year 1923—Continued.

REGULAR SUPPLIES—Continued.

Name of item.	Amount obligated to Mar. 11, 1922.	Amount included in Budget for 156,000 men.	Revised estimate submitted at House hearings for 156,000 men.	Amount passed by House.	Estimate Mar. 20 for 132,000 men.	Revised estimate Mar. 20 for 156,000 men.
Musical instruments, including spare parts and repairs and music for bands.....	\$63,533	\$75,444	\$75,000	.....	\$75,000	\$75,000
Mess equipment (formerly Ordnance item).....	300	.....	None.	.....	None.	None.
Intrrenching tools.....	.....	.....	None.	.....	None.	None.
Experimental purposes.....	11,940	31,343	10,000	.....	10,000	10,000
Marksmanship insignia.....	10,263	48,294	20,000	.....	20,000	20,000
Overhauling, cleaning, and repairing articles of textile, leather, and horse equipment, including artillery and reel harness.....	.....	71,101	None.	.....	None.	None.
Packing and handling of clothing and equipage.....	94,749	280,761	200,000	.....	200,000	200,000
10,000 enlisted Reserve Corps on active duty for 15 days.....	.....	.....	.....	.....	175,000	.....
Miscellaneous expenditures.....	585,812	.....	.....	.....	.....	.....
Total.....	5,742,796	9,827,669	5,197,444	\$5,000,000	5,000,000	5,197,444
Deduct for expenditures duplicated in above statement under salaries and wages.....	.....	1,950,080	.....	.....	.....	.....
Balance.....	.....	7,868,589	.....	.....	.....	.....

INCIDENTAL EXPENSES, 125,000 MEN PLUS 7,000 PHILIPPINE SCOUTS.

Salaries.....	\$2,324,721	\$7,713,078	\$2,113,068	.....	\$2,113,068	\$2,113,068
Wages.....	1,738,876	2,742,309	2,444,028	.....	2,444,028	2,444,028
Postage.....	6,671	9,320	9,320	.....	9,320	9,320
Incidental expenses of recruiting, not including rentals and lodgings.....	.....	225,155	225,155	.....	208,907	225,155
Reward for apprehension and delivery of deserters and escaped military prisoners.....	67,500	71,102	71,102	.....	71,102	71,102
Donation of \$10 to discharged military prisoners.....	20,000	16,580	16,580	.....	16,580	25,000
Additional expenditures as are necessary and authorized by law in the movements and operation of the Army, and at military posts and not expressly assigned to any other department.....	51,774	148,129	100,000	.....	100,800	435,909
Experimental and development work.....	.....	5,925	5,925	.....	5,925	5,925
Incidental expenses at civilian military training camps.....	.....	14,812	14,812	.....	14,812	14,812
10,000 enlisted Reserve Corps on active duty for 15 days.....	.....	.....	.....	.....	21,248	21,248
Telegrams and cablegrams.....	64,878	.....	.....	.....	.....	.....
Total.....	4,274,420	5,446,410	5,000,000	\$4,750,000	5,000,000	5,368,567

ARMY TRANSPORTATION.

ANIMAL-DRAWN TRANSPORTATION.						
Salaries and wages.....	\$554,580	\$456,025	\$522,500	.....	\$522,500	\$522,500
Draft and pack animals, hire of.....	524	825	825	.....	825	825
Draft and pack animals, purchase of.....	650	172,500	.....	.....	.....	.....
Animal-drawn vehicles and spare parts, purchase of.....	22,006	53,760	53,760	.....	53,760	53,700

Estimates for fiscal year 1923—Continued.

ARMY TRANSPORTATION—Continued.

Name of Item.	Amount obligated to Mar. 11, 1922.	Amount included in Budget for 156,000 men.	Revised estimate submitted at House hearings for 156,000 men.	Amount passed by House.	Estimate Mar. 20 for 132,000 men.	Revised estimate Mar. 20 for 156,000 men.
ANIMAL-DRAWN TRANSPORTATION—continued.						
Harness and horse equipment, purchase of.....	\$12,251	\$15,380	\$15,380	.....	\$15,380	\$15,380
Repairs and maintenance of animal-drawn vehicles and harness.....	70,874	50,450	50,450	.....	50,450	99,537
Packing and handling of animal-drawn vehicles and harness.....	8,059	1,050	1,050	.....	1,050	8,000
Total animal-drawn transportation.....	674,894	750,000	643,965	.....	643,965	700,000
MOTOR TRANSPORTATION.						
Salaries and wages.....	1,437,795	1,109,544	761,510	.....	761,510	761,510
Gasoline, lubricating oil, grease, etc.....	1,852,730	777,889	533,887	.....	533,887	568,540
Bicycles:						
Repair of.....	1,383	1,094	750	.....	750	750
Motorcycles, repair of.....	67,350	46,994	32,254	.....	32,254	32,254
Motor trucks, hire of.....	.....	75	52	.....	52	52
Automobiles, hire of.....	84	75	52	.....	52	52
Motor trucks and trailers, repair of.....	1,027,502	958,581	657,900	.....	657,900	657,900
Automobiles, repair of.....	254,306	237,482	162,990	.....	162,990	173,000
Motor transport shops, maintenance and operation.....	104,093	56,303	38,642	.....	38,642	58,642
Miscellaneous.....	11,830	.....	.....	.....	.....	.....
Total motor transportation.....	4,761,082	3,038,037	2,188,087	.....	2,188,087	2,300,000
WATER TRANSPORTATION.						
Salaries and wages (\$1,666,920, \$696,792, \$128,231).....	2,491,943	2,670,000	1,710,202	.....	1,710,202	1,710,202
Fuel for Army transports.....	1,292,602	1,475,000	944,773	.....	944,773	944,773
Deck, engine, and stewards' supplies.....	356,995	485,000	310,654	.....	310,654	310,654
Water for Army transports.....	26,484	15,000	9,698	.....	9,698	9,698
Laundry for Army transports.....	31,426	29,400	18,831	.....	18,831	18,831
Pilotage for Army transports.....	36,872	21,600	13,835	.....	13,835	13,835
Stevedoring for Army transports.....	189,192	216,000	138,353	.....	138,353	138,353
Removing ashes from Army transports.....	2,696	2,500	1,601	.....	1,601	1,601
Painting and cleaning Army transports.....	44,321	42,000	26,902	.....	26,902	26,902
Miscellaneous expenses, Army transports.....	74,248	88,100	56,430	.....	56,430	56,430
Towage, Army transports.....	15,168	7,200	4,612	.....	4,612	4,612
Repairs to Army transports.....	790,341	1,043,600	668,451	.....	668,451	718,451
Purchase and construction of Army transports.....	.....	.....	.....	.....	.....	.....
Wharfage, rental of.....	37,942	64,800	41,506	.....	41,506	41,506
Purchase and construction of river and harbor boats.....	.....	.....	.....	.....	.....	.....
Repairs to river and harbor boats.....	287,568	161,000	103,124	.....	103,124	103,124
Fuel for river and harbor boats.....	306,746	108,600	69,561	.....	69,561	69,561
Supplies for river and harbor boats.....	97,464	69,000	44,196	.....	44,196	44,196
Water for river and harbor boats.....	3,829	2,400	1,537	.....	1,537	1,537
Hire of substitute boats, river and harbor boats.....	26,333	12,000	7,686	.....	7,686	7,686
Miscellaneous expenses, river and harbor boats.....	11,909	7,000	4,484	.....	4,484	4,484
Purchase and construction, Coast Artillery boats.....	.....	.....	.....	.....	.....	.....

Estimates for fiscal year 1923—Continued.

ARMY TRANSPORTATION—Continued.

Name of item.	Amount obligated to Mar. 11, 1922.	Amount included in Budget for 156,000 men.	Revised estimate submitted at House hearings for 156,000 men.	Amount passed by House.	Estimate Mar. 20 for 132,000 men.	Revised estimate Mar. 20 for 156,000 men.
WATER TRANSPORTATION—continued.						
Fuel for Coast Artillery boats.	\$283,979	\$92,000	\$58,928		\$58,928	\$97,821
Supplies for Coast Artillery boats.	89,923	62,000	39,713		39,713	39,713
Repairs to Coast Artillery boats.	261,764	110,000	70,458		70,458	97,000
Water for Coast Artillery boats.	3,708	2,600	1,665		1,665	1,665
Hire of substitute boats, Coast Artillery boats.	2,275	6,000	3,843		3,843	3,843
Miscellaneous expenses, Coast Artillery boats.	9,808	7,200	4,612		4,612	4,612
Total water transportation.	6,777,536	6,800,000	4,355,565		4,355,565	4,500,000
RAIL TRANSPORTATION.						
Salaries and wages (\$207,792, \$896, \$600, I. P. S. \$400,000).	209,278	1,093,744	893,744		893,744	893,744
Civilian employees, reimbursement of travel expenses.	33,673	40,000	40,000		40,000	40,000
Cadets, United States Military Academy, reimbursement of travel expenses.	1,770	10,000	10,000		10,000	10,000
Travel allowance to discharged officers and enlisted men.		3,252,715	2,840,140		2,840,140	2,840,140
Railroad equipment, repairs, operation, and maintenance.	24,339	77,580	77,580		77,580	77,580
Troops, changing station, transportation of.		1,443,000	1,802,556		1,718,178	3,668,000
Applicants for enlistment and recruits, transportation of.		399,900	399,900		399,900	399,900
Recruiting parties, transportation of.		28,211	28,211		28,211	28,211
Impediments of organizations and property accompanying troops changing stations, transportation of.		140,000	140,000		140,000	284,000
Public animals with troops changing stations, transportation of.		151,000	100,000		100,000	142,000
Horses of officers changing stations, transportation of.		30,000	30,000		30,000	42,000
Baggage of officers, transportation of.		170,000	100,000		100,000	184,000
Baggage of enlisted men, transportation of.		31,737	31,737		31,737	60,000
Baggage of civilian employees, transportation of.		12,695	12,695		12,695	12,695
Dishonorably discharged soldiers and insane persons, transportation of.		100,000	100,000		100,000	100,000
Agents and employees of the Army, transportation of.		88,000	50,000		50,000	50,000
Dependents upon change of permanent station of officers and noncommissioned officers, transportation of.		84,632	84,632		84,632	120,000
Street car tickets, tolls, and ferrages, payment of.		35,264	15,264		15,264	15,264
Transportation of.	15,029,622					
Clothing and equipage.		300,000	500,000		500,000	500,000
Quartermaster stores, other.		1,080,000	1,080,000		1,080,000	1,080,000
Subsistence stores.		425,000	637,575		637,575	644,952
Horses for Cavalry, Artillery, Engineers, etc.		35,000	35,000		35,000	35,000
Draft and pack animals from place of purchase.		25,000	25,000		25,000	25,000

¹ Includes \$300,000 for enlisted reserve corps.

Estimates for fiscal year 1923—Continued.

ARMY TRANSPORTATION—Continued.

Name of item.	Amount obligated to Mar. 11, 1922.	Amount included in Budget for 156,000 men.	Revised estimate submitted at House hearings for 156,000 men.	Amount passed by House.	Estimate Mar. 20 for 132,000 men.	Revised estimate Mar. 20 for 156,000 men.
RAIL TRANSPORTATION—COD.						
Transportation of—Continued.						
Supplies for vocational training.....		\$7,053	\$7,053		\$7,053	\$7,053
Horse equipment.....		14,105	14,105		14,105	14,105
Ordnance, ordnance stores, and small arms.....		390,000	390,000		390,000	935,000
Signal Corps stores.....		65,000	65,000		65,000	192,477
Engineer Corps supplies.....		53,000	53,000		53,000	277,000
Medical Department supplies.....		56,422	56,422		56,422	302,000
Aviation Service supplies.....		200,000	200,000		200,000	300,000
Tank Corps supplies.....		14,105	14,105		14,105	14,105
Chemical warfare supplies.....		8,463	8,463		8,463	17,500
Funds of the Army, money accounts and finance records.....		6,347	6,347		6,347	6,347
Drayage, cartage, and hauling:						
At posts.....	\$11,272	20,000	20,000		20,000	20,000
At depots.....	603	3,000	3,000		3,000	3,000
At arsenals and armories.....	924	7,500	7,500		7,500	7,500
In the field.....	1,049	1,000	1,000		1,000	1,000
Packing and crating supplies and baggage.....	190,750	70,527	70,527		70,527	120,527
Submarine mine supplies, transportation of.....	15,000	20,000	20,000		20,000	20,000
Total rail transportation.....	15,524,490	10,000,000	9,980,556		9,896,178	13,500,000
Total Army transportation.....	27,737,992	20,738,037	17,168,123	\$16,000,000	17,083,745	21,000,000

CONSTRUCTION SERVICE.

Name of item.	Obligated to Mar. 11, 1922.	Included in Budget for 156,000 men.	Reallocation submitted to House for 156,000 men.	Passed by House.	Estimate Mar. 20, 1922, for 132,000 men.
WATER AND SEWERS.					
Salaries and wages.....	\$697,848	\$850,000	\$850,000		\$850,000
Water and sewer systems, installation of.....	5,338				
Water, purchase of, at posts and stations.....	649,759	850,000	1,150,000		368,000
Fire apparatus, including fire-alarm systems:					
Purchase and installation of.....	5,263	15,000	15,000		10,000
Maintenance and repair of.....	23,077	25,000	25,000		42,000
Incinerators and other buildings for disposal of sewage.....	115	5,000	5,000		
Fuel for incinerators and pumping plants.....	38,675	100,000	200,000		200,000
Water and sewer systems, including chemicals for purification of water and sewage, and all plumbing in buildings where not specifically otherwise provided for, including all piping for sprinkler systems, maintenance and repair of.....	74,943	55,000	255,000		400,000
Civilian military training camps and enlisted Reserve Corps.....					20,000
Total, water and sewers.....	1,495,018	1,900,000	2,500,000	\$1,750,000	2,390,000

*Estimates for fiscal year 1923—Continued.***CONSTRUCTION SERVICE—Continued.**

Name of Item.	Obligated to Mar. 11, 1922.	Included in Budget for 156,000 men.	Reallocation submitted to House for 156,000 men.	Passed by House.	Estimate Mar. 20, 1922, for 13,000 men.
BARRACKS AND QUARTERS.					
Salaries and wages.....	\$1,024,824	\$1,250,000	\$1,250,000		\$1,100,080
Barracks, quarters, etc.: Construction of.....	281,572				
Maintenance and repair.....	2,467,969	1,706,016	2,206,016		1,832,000
Rental of barracks and quarters for occupation by troops.....	87,646	700,000	700,000		570,000
Rental of grounds for cantonments, camp sites and other military purposes.....	106,738	161,000	161,000		161,000
Hire of recruiting stations and lodgings for recruits.....	295	44,000	44,000		44,000
Furniture for public rooms of officers' messes and quarters at military posts.....	10,485	100,000	100,000		25,000
Temporary structures, civilian military training camps.....		18,000	18,000		18,000
Temporary structures, enlisted reserve corps.....					20,000
Total barracks and quarters.....	3,979,529	3,979,016	4,479,016	\$2,982,638	3,770,000
BARRACKS AND QUARTERS, PHILIPPINE ISLANDS.					
Shelter and protection for officers and enlisted men, animals and supplies, and all other buildings necessary for post administration purpose in the Philippine Islands, maintenance, operation, and repair.....	185,305	230,000	230,000		230,000
Rental of grounds, etc.....	70,000	70,000	70,000		70,000
Total barracks and quarters, Philippine Islands.....	255,305	300,000	300,000	200,000	300,000
ROADS, WALKS, WHARVES, AND DRAINAGE.					
Salaries and wages.....	294,340	400,000	200,000		358,000
Roads, walks, wharves, and drainage, etc.: Construction of.....	9,900				
Maintenance and repair.....	232,789	406,000	135,000		245,000
Railroads, sidings, and switches (Quartermaster Corps only), maintenance and repair of.....	46,774	25,000	125,000		170,000
Wharves (Quartermaster Corps only), maintenance and repair of.....	32,434	20,000	20,000		25,000
Total roads, walks, wharves, and drainage.....	616,237	850,000	500,000	500,000	790,000
SHOOTING GALLERIES AND RANGES.					
Rentals of ground for shooting galleries and ranges.....	1,032	1,300	1,300		1,300
Shooting galleries and shelter, grounds, ranges for target practice, operation, maintenance and repair of.....	24,870	23,500	23,500		23,500
Total shooting galleries and ranges.....	25,902	24,800	24,800	24,800	24,800
RENT OF BUILDINGS, QUARTERMASTER CORPS.					
Rent of buildings in the District of Columbia for military purposes.....	127,165	95,000	95,000		112,362
Total rent of buildings, Quartermaster Corps.....	127,165	95,000	95,000	112,362	112,362

*Estimates for fiscal year 1923—Continued.***CONSTRUCTION SERVICE—Continued.**

Name of item.	Obligated to Mar. 11, 1922.	Included in Budget for 156,000 men.	Reallocation submitted to House for 156,000 men.	Passed by House.	Estimate Mar. 21, 1922, for 132,000 men.
CONSTRUCTION AND REPAIR OF HOSPITALS.					
Hospitals:					
Including outbuildings and necessary temporary hospitals and quarters for hospital personnel, and also including heating and laundry apparatus, all plumbing, water supply and sewage systems, electric wiring and fixtures, cooking apparatus, and roads and walks for the same, construction of and additions to buildings for use as hospitals.	\$178,334				
Including outbuildings and necessary temporary quarters for hospital personnel and the alteration of buildings for use as hospitals, and also including heating and laundry apparatus, all plumbing, electric supply and sewage systems, electric wiring and fixtures, cooking apparatus, and roads and walks for same, maintenance and repair of.	512,486	\$520,360	\$520,360		\$520,360
Rental of grounds and buildings for use for hospital purposes, including temporary quarters for hospital personnel and outbuildings, heating and laundry apparatus.	6,589	9,000	9,000		9,000
Total construction and repair of hospitals.	697,409	\$529,360	\$529,360	\$529,360	\$529,360
QUARTERS FOR HOSPITAL STEWARDS.					
Maintenance and repair of quarters for hospital stewards at military posts already established and occupied.	10,197	15,000	10,000		10,000
Total quarters for hospital stewards.	10,197	15,000	10,000	5,000	10,000

WAR DEPARTMENT APPROPRIATION BILL 1923.

THURSDAY, APRIL 20, 1922.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10.30 o'clock a. m.

Present: Senators Wadsworth (chairman), Lenroot, and Harris.
B. F. Harrah, assistant auditor and legal adviser, appeared.

THE PANAMA CANAL.

STATEMENT OF MR. A. L. FLINT, GENERAL PURCHASING OFFICER AND CHIEF OF OFFICE, PANAMA CANAL.

Senator WADSWORTH. Mr. Flint, you desire to discuss the Panama Canal appropriations?

Mr. FLINT. I desire to discuss the changes in the appropriations and legislation made by the House as compared with estimates referred to in a letter addressed to the chairman of the committee by the Secretary of War of April 1, 1922, which is based on recommendations received from the Governor of the Panama Canal by cable. I should like to suggest that it might be well to put that letter in the record, if you see no objection to it.

Senator WADSWORTH. Very well.

(The letter referred to is as follows:)

WAR DEPARTMENT,
Washington, April 1, 1922.

HON. FRANCIS E. WARREN,

Chairman Committee on Appropriations, United States Senate,

Washington, D. C.

MY DEAR SENATOR: The War Department appropriation bill (H. R. 10871), as passed in the House of Representatives on March 29, 1922, includes appropriations for the Panama Canal under a subhead entitled "The Panama Canal" (p. 129), under "Title II, Nonmilitary activities of the War Department" (lines 13 and 14, page 105), and I desire to recommend that the changes indicated below be made in the bill so far as it relates to the Panama Canal.

The bill contains certain changes from the estimates for the Panama Canal as approved by the Bureau of the Budget, among which are the following:

Page 131, line 9—the amount for sanitation, quarantine, hospitals, etc., has been reduced from \$608,400 to \$500,000.

Page 131, line 13—the amount for civil government of the Panama Canal and Canal Zone has been reduced from \$973,340 to \$915,000.

Page 131, lines 21 to 24, inclusive—a new paragraph has been inserted, reading: "No part of the foregoing appropriations for the Panama Canal shall be used to pay the salary for any position at a rate in excess of the rate in effect for such position on June 30, 1921."

Page 132, line 6—after the word "supplies" the following language in the Panama Canal estimates has been eliminated: "and except for the permanent operating organization under which the compensation of the various positions is limited by section 4 of the Panama Canal act." This clause has been included in appropriation acts covering the Panama Canal ever since the fiscal year 1914.

These changes were in the bill as reported in the House of Representatives, except that there was then a provision in the bill to the effect that no part of the appropriation for civil government should be used for making payments to the Government of Panama for postage stamps, which provision was stricken out on the floor of the House on motion of Mr. Anthony, who is in charge of the bill, who also moved an amendment to increase the appropriation for civil government from \$875,000 to \$915,000, so as to provide for the continued purchase of postage stamps from Panama, which amendment was carried. Col. Jay J. Morrow, Governor of the Panama Canal, was advised by cablegram of the above-mentioned changes, and the following self-explanatory cablegram, dated March 16, was received from him by the Washington office of the Panama Canal:

"Referring to your cable of the 14th instant, endeavor to have increased sanitation appropriation to \$550,000; civil government, Panama Canal and Canal Zone, to \$950,000. Out of \$108,000 in sanitation will seriously cripple necessary hospital quarantine, and sanitary service. Essential that civil government be increased to amount stated to provide necessary facilities which have run down through failure to appropriate for necessary requirements for past four years for general material, supplies, and repairs, and for replacements of equipment for fire service. It is impractical to continue civil government expenditure at rate of expenditure for 1922. Both these services were carefully considered by Budget office with data at hand last fall. Later data enables me to agree that their recommendations can be reduced to figures above given, but to advise that any further cut can be accomplished only by abandonment of some necessary service. * * * Ask to have new paragraph as to increased salaries eliminated. While this is aimed at January increases of officials, it would also affect many unofficial increases made necessary by increased duties and responsibilities of positions as well as increases made in conformity with the policy of paying to certain classes the full 25 per cent above State rates, and would be most unjust to all and nullifies the exceptions allowed by the emergency provision."

There has been elided from Governor Morrow's cable the reference to the provision relative to stamps, as this has been remedied by the action taken on the floor of the House above mentioned.

After the bill was passed by the House, Governor Morrow was advised by cable of the status of the Panama Canal items in the bill, and the following self-explanatory cablegram, dated March 30, has been received from him by the Washington office of the Panama Canal:

"Referring to your cable of the 28th instant, request additional sanitation appropriation \$50,000 amount required for essential hospital sanitation and quarantine activities. While expenses have reduced and will probably reduce further next year, reduction will probably entail corresponding reduction in revenues. Canal also required to finance for a considerable time outstanding bills against Army and Navy. Civil government, Panama Canal, and Canal Zone, additional amount required at least \$35,000 for following purposes: Repairs to post offices, \$2,500; repairs to school buildings, equipment, and furniture, \$8,000; repairs to police stations, \$2,500; buildings in very bad condition and real economy calls for much larger sums; new fire equipment, \$7,500; additional teachers for colored schools, including increased pay as directed by Secretary of War, \$8,000; additional for police force \$6,500. Also request that salary limitation be eliminated and clause relative permanent operating force be reinserted. Consider Panama Canal act sufficiently limits amount of compensation, especially since charges are made for rent, etc."

In view of the representations made by Governor Morrow in the two cablegrams above quoted, it is respectfully recommended and requested that your committee give consideration to these matters with a view to amending the bill so as to increase the appropriations for sanitation and civil government to the respective amounts requested by Governor Morrow in his cables, that the provision concerning the limitation on payment of the salary for any position at a rate in excess of the rate in effect for such position on June 30, 1921, be eliminated, and that the language that has been elided from the paragraph on page 132, relating to the permanent operating force, be reinserted.

If the increases in the appropriations above mentioned are made, the total now carried in the bill for the Panama Canal should be increased from \$4,074,434 (line 14, p. 131) to \$4,159,434.

In addition to the foregoing, Governor Morrow has called attention to the fact that the title of the bill makes appropriations "For the military and nonmilitary activities of the War Department," and is divided under two titles and includes the Panama Canal under Title II on a par with "Rivers and harbors" and other nonmilitary activities. In this connection I quote the following cablegram received from Governor Morrow under date of March 28 regarding this matter:

"Suggest amendment H. R. 10871 by insertion 'and the Panama Canal' in title and in line 5, page 1, after words 'War Department' and insertion 'Title III' on line 10, page 128 (now line 1, page 129). Panama Canal was created by special act of Congress and placed under jurisdiction of President. President has administered Panama Canal through Secretary of War personally, and all Executive orders and laws have heretofore considered Panama Canal as independent establishment. To prevent any misunderstanding and attempt to apply general laws intended only for War Department proper, including such limitations as found on page 5, lines 18 to 21, amendment of bill should be made."

While it is not believed that it is the intention by the present bill to change the present status of the Panama Canal, I agree with Governor Morrow that, in order to prevent any misunderstanding, it would be advisable to make the changes suggested by him. In addition to the reasons given by Governor Morrow, it might be stated that if by any chance the bill in its present form should be construed as placing the Panama Canal under the War Department, it might also be construed as bringing all the contracts that are made by the Panama Canal within the provisions of section 3744 of the Revised Statutes, which would require such contracts to be reduced to writing, signed by the contracting parties with their names at the end thereof, and copies made and filed in the returns office of the Interior Department.

This would more than double the work connected with the preparation of contracts in the Washington office of the Panama Canal and, furthermore, would have a tendency to delay the delivery of the material called for under the contracts, for the reason that no contractor would be justified in proceeding with the shipment or preparation for shipment of material until the formal written contract was executed. At the present time most of the contracts consist of a proposal and acceptance, after due advertisement. If it were necessary to make formal written contracts in all cases, it would seriously interfere with obtaining prompt delivery of supplies at the Isthmus, which in a great many instances is essential to the proper prosecution of the work. As indicated by Governor Morrow, unless the suggested amendments are made, it might also be construed that special statutes that have been passed with reference to the work of the War Department would become applicable to the Panama Canal, which in many cases would hamper the work very much.

I venture to express the hope that favorable action will be taken on all the changes requested, which it is believed are in the interest of proper administration and operation of the Panama Canal. If your committee should desire any further information regarding any of the above-mentioned matters, it is suggested that you call upon Mr. A. L. Flint, chief of the Washington office of the Panama Canal, to appear before your committee.

Sincerely yours,

JOHN W. WEEKS.
Secretary of War.

SANITATION, QUARANTINE, ETC.

Mr. FLINT. The first change desired is to increase the appropriation for sanitation, quarantine, hospitals, etc., from \$500,000 to \$550,000, page 130 of the bill, line 9.

Senator WADSWORTH. I understand that that \$550,000 is a revised estimate.

Mr. FLINT. That is the revised request of the governor. The estimate in the Budget was \$608,400. That had been reduced to that

figure from the original estimate of \$655,000, and the amount allowed by the House is only \$500,000.

I should like to emphasize what the governor says in his cable about that. When the bill was first reported in the House, he said:

Endeavor to have increased sanitation appropriation to \$550,000. * * * Cut of \$108,000 in sanitation will seriously cripple necessary hospital, quarantine, and sanitary service.

Then, when that increase was not made by the House, the governor cabled again:

Request additional sanitation appropriation \$50,000, amount required for essential hospital sanitation and quarantine activities. While expense have reduced and will probably reduce further next year, reduction will probably entail corresponding reduction in revenues. Canal also required to finance for a considerable time outstanding bills against Army and Navy.

Senator WADSWORTH. What are those "outstanding bills against Army and Navy?"

Mr. FLINT. The Army and Navy pay the Panama Canal for treatment of their personnel at the canal hospitals; and you will find that the original estimate shows, as to the expenses of sanitation, quarantine, and hospitals, \$1,483,400, and estimated collections of \$700,000. That reduced the amount required for current expenses to \$783,400; and then there is a deduction of \$175,000 made for payments to be made by the Republic of Panama on old bill, making the net estimate \$608,400. The governor has since explained that the latest estimates show that the receipts will probably be only \$650,000 instead of \$700,000, made up as follows:

Panama Railroad Co., \$90,000.

Other departments of the Government, \$80,000.

Panama Government, \$160,000.

Employees and outsiders, \$265,000.

Services for other canal divisions and departments, \$55,000.

That makes a total of \$650,000.

When any other department, like the Army, has services performed by the sanitary department, it is billed for it, and that is credited from the appropriation as one of the collections to be made, the same as for any other service that might be performed. I am not informed in detail as to what other service might be paid for by the Army. I think it is principally hospital service.

Senator WADSWORTH. Do I understand that the Army has no hospital of its own there?

Mr. FLINT. No, sir. All the personnel are treated at the canal hospitals. The Army may have some little post dispensaries; I am not advised as to that.

Senator WADSWORTH. Is the personnel in charge of the canal hospitals all civilian personnel?

Mr. FLINT. Mainly, but not necessarily, because the Canal has authority to employ Army surgeons, and also one officer of the Public Health and Marine Hospital Service as quarantine officer. When they do that, their salaries are fixed and paid out of the canal appropriations and their Army pay deducted. This is authorized by the Panama Canal act. For instance, the chief health officer is an Army officer, but he reports to the governor, and there are other officers. In other words, the governor is in charge of everything of that kind on the canal. The superintendent of Ancon Hospital happens to

be an Army officer. When they desire to secure an Army officer for any position there, the governor makes the request of the War Department for his detail, and he is appointed under the governor, but his Army pay is deducted from his canal pay.

Senator LENROOT. I should like to ask a question there, to see if I understand you. All the expenses are paid out of this appropriation, are they, and any receipts are turned into the Treasury?

Mr. FLINT. No, sir. The receipts are deducted from the total expenses as shown in the estimates. They are credited to the appropriation, it is true, but the expenditure is nevertheless made by the canal.

Senator WADSWORTH. The receipts are turned in to the treasury of the canal?

Mr. FLINT. They are turned in to the credit of the appropriation. You see, the original estimate of the total expenses here is \$1,483,400, and in making up the net estimate there is a credit in the estimate of that \$700,000 for collections.

Senator LENROOT. Then, do I understand that there is a total expenditure under the estimate of \$1,300,000?

Mr. FLINT. There is a total expenditure of \$1,483,400 under the estimates for hospitals, quarantine, and sanitation; but the canal does this business on the isthmus for the Army, or even for outsiders that may go to the hospitals, and that helps to maintain them.

Senator LENROOT. I understood that. I am not criticizing that at all; but in every other department of the Government, as far as I now recall, we have gotten away from this system of allowing receipts to be used for expenses, and then appropriating the balance. We appropriate for the full amount, and have the receipts go into the Treasury.

Senator WADSWORTH. Is that part of the basic law?

Mr. FLINT. Yes, sir; and, of course, that question has come up many times. I should like to call particular attention to a letter from the Secretary of War to the chairman of the House Committee on Appropriations on page 507 of the House hearings on this bill.

The Canal is the great business concern down there. We have authority to do work, for instance, in the repair of vessels, and perform service for all other departments on the Isthmus; and if we did not have a revolving fund, which it what it practically amounts to, by using those appropriations over again, the estimates would have to be very large. For instance, I think it is estimated that for the whole Canal the estimates would have to be increased to \$13,283,061 for the fiscal year 1923 if we were not allowed to use the proceeds of work done or for services performed for other departments or for the general public. It is in the basic law.

Judge Harrah, here, who is our assistant auditor and legal adviser, can explain as to the authority for that. Do you want to explain that, Judge Harrah?

Mr. HARRAH. I think the committee understand that thoroughly. I think the authority is in the Panama Canal act—

Senator LENROOT. Yes; I understand.

Mr. HARRAH. It is also in the appropriation from year to year, that all receipts from the conduct of all business by the Panama Canal are credited back to the appropriations under which the original expenditure was made. That is the situation. Under the hos-

pital and sanitation service there, the receipts that would become a credit to that appropriation amount to about \$700,000, do they not?

Mr. FLINT. Yes; the amount is now estimated to be only \$650,000.

Mr. HARRAH. So the total expenditures for sanitation and hospital service are about \$1,300,000, are they not? Give the exact figures.

Mr. FLINT. In the original estimate \$1,483,400.

Mr. HARRAH. The original estimate was \$1,483,400, and the collections are \$700,000.

Mr. FLINT. And then there are old bills of Panama of \$175,000 in addition, which it is estimated will be collected.

Mr. HARRAH. Which would leave necessary to be appropriated \$608,400. Owing to the decrease in the business, as I understand, the governor has come to the conclusion that he can get along with \$550,000. The House says he must get along with \$500,000. I think that is the situation.

Mr. FLINT. Yes.

Mr. HARRAH. Mr. Flint has the details as to where we need that \$50,000.

Senator LENROOT. So what you really do is to turn into the Treasury at the end of each year the profits?

Mr. FLINT. Any net profits of the whole business; yes.

Senator LENROOT. In arriving at those net profits you do not take the whole operation but you divide it. That is, there might be net profits in the operation of the Canal, but when you come to hospitals there might be a deficiency?

Mr. HARRAH. There might be a deficiency.

Mr. FLINT. Yes; if there were no net profits there would be nothing to turn in.

Mr. HARRAH. As I understand, in arriving at the net profits they take the entire service of the Panama Canal.

Senator LENROOT. Does the basic law permit you to use the revenue from operation for anything beyond the operation of the Canal?

Mr. HARRAH. I do not think it allows us to use it for anything beyond operation. I think it can be applied to everything in connection with the operation, maintenance, and sanitation of the Panama Canal.

Mr. FLINT. For instance, in repairing vessels the amount paid by the vessel would be credited to the appropriation; but if there were any net profit on all business operations at the end of the fiscal year, that would later be turned into the Treasury.

Senator WADSWORTH. Then you can not use the net profit, if any, derived from the repair of merchant vessels for hospitals and quarantine?

Mr. FLINT. No, sir.

Senator WADSWORTH. It is kept separate?

Mr. FLINT. These appropriations are separate.

Senator LENROOT. Are there two appropriations?

Mr. FLINT. There are three—maintenance and operation, sanitation, and civil government.

Senator LENROOT. The civil government does not have anything to do with that, does it? Do you get receipts from the civil government?

Mr. FLINT. Very little. I will come to that item in a few minutes.

Senator WADSWORTH. We will take that up in just a moment.

Mr. FLINT. There is a very small amount from the civil government, because it is practically all outgo for schools, fire department, courts, etc.

MAINTENANCE AND OPERATION.

Senator LENROOT. Did you explain the first item, \$2,659,434, where you had \$7,250,000 this year?

Mr. FLINT. No, sir.

Senator LENROOT. I wish you would.

Mr. FLINT. For maintenance and operation, the estimates as submitted by the Budget this year show total estimates for current expenditures of \$6,635,464. The amount, though, was reduced to \$2,659,434 by deductions of sums considered available to reduce the appropriation for 1923. For instance, the governor reported that he would have an unobligated balance June 30, 1921, of \$660,000, and savings during 1922 estimated at \$301,300. Then there is an item of \$1,014,730 previously charged for depreciation, 1922 and 1923, not actually required for immediate disbursement; and then he estimated that material and supplies required for expenditures, to be supplied from stock on hand during 1922 and 1923, \$1,000,000 for each year, could be deducted on the ground that the stock on the Isthmus will be reduced by that amount, and he is frankly giving you these figures to show that after those deductions are made, a total of \$3,976,030, the actual appropriation required, will be only \$2,659,434.

Senator WADSWORTH. We have no right, however, to expect that this appropriation of \$2,659,434 will meet the actual cost of maintenance and operation?

Mr. FLINT. The actual cost will be \$6,635,464, as against estimated expenditures for this year of \$7,247,949—a reduction in expense.

Senator LENROOT. It is a reduction of \$4,500,000.

Mr. FLINT. Part of it is accounted for by using up stock. In other words, instead of keeping that much stock on hand, and buying new stock, they will reduce their stock, and that will reduce the necessity for appropriations.

Senator LENROOT. Is there any estimate of increased receipts during the next year that will account for any part of that?

Mr. FLINT. I should like to explain that the receipts from tolls go into "miscellaneous receipts." We do not use those in our appropriations at all. The receipts we get are only from actual work performed or sales made.

Senator LENROOT. Where do the tolls go?

Mr. FLINT. The tolls go into the Treasury, into "miscellaneous receipts."

Senator LENROOT. Do you handle them?

Mr. FLINT. We collect them, but otherwise they do not go through our appropriation. The money is turned directly in. The only receipts that are credited to our appropriations, as we have explained, are those for work or services performed, authorized under the Panama Canal act.

TOLLS COLLECTED.

Senator HARRIS. What do the tolls amount to?

Mr. FLINT. The tolls during the last fiscal year, I think, amounted to—I shall have to correct the figure—about \$11,000,000.

NOTE.—The tolls collected for the fiscal year 1921 amounted to \$11,261,919.31

Senator HARRIS. And the total expenses were how much?

Mr. FLINT. The total expense for operation and maintenance is \$6,635,464, estimated for next year, outside of sanitation and civil government.

Senator HARRIS. And how much are you asking for that?

Mr. FLINT. So far as the net amount for sanitation is concerned, we are now asking \$550,000, and for civil government \$950,000.

Senator LENROOT. In the performance of this work do you estimate a profit, like repairs?

Mr. FLINT. In doing work for ships, etc., they anticipate a profit; but, nevertheless, they try to do the work at as reasonable prices as possible, so as to make the Panama Canal route attractive. One of the reasons for our going into this business was that there was no other organization there capable of doing, at the time the canal was opened, the work that is necessary to be done to ships. Probably in the first place they could not have gotten the work done, and if they had gotten it done it would have been at exorbitant prices; so we wanted to make the route attractive by doing the work at as reasonable prices as possible.

Senator HARRIS. You are not losing any money on that?

Mr. FLINT. No, sir.

Mr. HARRAH. If you will pardon me just a minute, right on that proposition—

Senator LENROOT. Yes.

Mr. HARRAH. If you will turn to page 297 of the estimate, there is a tabulated statement which shows the following:

Panama Canal receipts deposited in the Treasury and not available for expenditure by canal: Estimated tolls 1923, \$13,000,000; estimated 1922, \$11,500,000; actually collected, 1921, \$11,261,919.31.

From interest, licenses, taxes, fees, fines, etc., which go into the Treasury to the credit of "miscellaneous receipts," it is estimated that in 1923 there will be received \$200,000; it is estimated that we will receive in 1922, \$210,000; and there was actually received and covered into the Treasury in 1921, \$213,986.19.

Profits on business operations: It is not estimated that they will make any profits on business in 1923. In 1922 it is estimated that the profits will be \$50,000. In 1921 there was an actual profit turned into the Treasury of \$564,211.20.

The total of money that will go into the Treasury as "miscellaneous receipts" from operation of the Panama Canal is as follows:

Estimated for 1923, \$13,315,000. Estimated for 1922, \$11,760,000. Actually paid in in 1921, \$12,040,116.70.

That is what you might call the actual receipts that we get from the Panama Canal.

Senator LENROOT. Will you tell us why there is no estimate of profits on business done for 1923, like these profits that have accrued in the past?

Mr. HARRAH. I suppose the reason for that is found in the fact that the business of the Panama Canal has fallen off very materially of late.

Senator LENROOT. Your estimate for 1923 does not indicate that.

Mr. HARRAH. Those receipts come from tolls, largely. Perhaps I did not understand you.

Senator LENROOT. You had, one year, \$500,000 profit on business done. That is not on tolls, is it?

Mr. HARRAH. No; no.

Senator LENROOT. This is to cover what you are talking about—other kinds of business—and in 1922 it was estimated at \$50,000.

Mr. HARRAH. Yes.

Senator LENROOT. For 1923 there is none, and yet your estimate of tolls is larger in 1923 than in 1922. I am curious to know why it should be assumed that there will be no profit on business done in 1923.

Mr. FLINT. The amount of work done for ships will be very much reduced notwithstanding there might be an increase in the actual number of ships going through, which is now questionable, because there has been a falling off in the number of ships going through. During the war and two years after the war, up to the end of 1920, at least, and later, we were doing a very large amount of repair work for vessels, because at that time we actually did work cheaper than they could get it done in the States.

In other words, because of the rush of work in the States and exorbitant charges for labor and material, and perhaps profiteering, the expense was very great and we were doing it as nearly as possible at cost—as reasonably as possible. We had, therefore, a great deal of work. Now, however, conditions have changed, probably because of the reduction in the cost in the United States, and our work would probably cost more because we pay employees more down there than in the United States and there is the added cost of transportation to get material down there, and therefore we do not expect to do a large amount of repairing except for emergency work. Vessels that can get repaired in the States will not have the work done at the Canal or have ordinary repairs made that are not actually needed; and there will be a great reduction in the amount of work on that account, and it has been reflected in the reduced forces employed.

Senator LENROOT. Is that reflected in the estimate?

Mr. FLINT. Yes, sir; it has been reflected in the estimate.

Senator LENROOT. What is the item in which that is shown?

Mr. FLINT. Of course, the employees employed for that work are those who are paid mostly out of receipts, and therefore it is not reflected entirely in the appropriation, but it is reflected in the total receipts.

Mr. HARRAH. On that same page, it is estimated that the total receipts from appropriations for 1923 will be \$4,241,174, and for 1922 they will be \$9,016,269. The amount actually expended in 1921 was \$13,637,949.96.

Mr. FLINT. Here are the figures to which I should like to call attention, Judge. That does not show the total amount of work. Those are the appropriations.

On page 286, at the bottom, the total expenditure for operation and maintenance for 1923 are estimated at \$14,611,051; estimated in 1922, \$16,924,473; actual expenditures in 1921, \$26,789,960.11. Then, on page 287, you will find a deduction made of what are called the reimbursable expenditures—that is, these amounts that are received for work done for other departments or for the shipping, or whatever it may be, by the canal, including sales. They are as follows: In 1923, reimbursable expenses, \$8,275,587; in 1922, \$9,676,524; in 1921, \$15,111,760.83. That shows a progressive reduction in the amount of work done and sales made under the reimbursable appropriations. Then the net estimates for operation and maintenance are also shown on that page, in the next footing: For 1923, \$6,637,464; in 1922, \$7,247,949; and in 1921, \$11,678,199.28.

Those are the figures that show the reduction in the total work done.

Mr. HARRAH. The less work we do, the less the net profits are

Senator HARRIS. Just how much is the repair work that you are doing there costing the Government? I am talking about your repairing ships for other people. That is a separate item.

Mr. FLINT. The total cost of that is planned to be reimbursed. Apparently, there are no net profits estimated, but, nevertheless, it is proposed to be done at something above cost.

Senator HARRIS. That is what I was trying to get at. I wanted to know just the cost of that work, and what the revenue from that work would be. You keep it separate.

Mr. FLINT. I do not think I have here the amount of work done on ships. It is not separated here. I could not give those figures.

I should like to explain in connection with these whole estimates for the Canal that of course they are made up on the Isthmus, and the Governor came up and appeared before the House committee and explained them. When it comes to details of the kind you now ask me about I am hardly prepared on them, because all these data are on the Isthmus, or the Governor may have had them with him when he came here. I should also like to explain that the House Committee on Appropriations used to go to the Isthmus prior to the war and have hearings down there; but since the war started, and even since the termination of the war, they have not been down, although they very much wanted to go down, I think, last year, but they could not possibly arrange it.

The Governor is hoping, and I think the committee, too, that they will be able to go to the Isthmus this year and hold hearings down there, where it is much more satisfactory to get all the details, of course, than in this way, especially from me, because it is very difficult for me to explain all questions like that. As I understand, however, the House Committee on Appropriations was satisfied regarding maintenance and operation, and therefore I did not come prepared to take up questions connected with that appropriation, except that any questions I can answer I shall be glad to answer; but I feel, of course, that it is a little difficult to answer detailed questions of that kind.

RESERVE FOR DEPRECIATION.

Senator WADSWORTH. I should like to ask you one or two questions. In very greatly reducing this appropriation for maintenance

and operation down to the figure of \$2,659,000, you stated to the committee that there were two or three elements which made possible that reduction. One was the use of stock on hand, which apparently has accumulated faster than it could be consumed.

Mr. FLINT. That is partly on account, too, of the reduction in the value of work being done.

Senator WADSWORTH. Yes; I can understand that. You stated, also, that there was a surplus in the amounts charged to depreciation in 1921 and 1922.

Mr. FLINT. 1922 and 1923; yes, sir—\$1,014,730.

Senator WADSWORTH. Was that a bookkeeping charge against depreciation, or was that an actual amount of money set aside from an appropriation made by Congress for the purpose of meeting depreciation, which has not been spent, and is still available?

Mr. FLINT. I think it is that, sir. In 1922, in other words, their estimate must have included an amount to cover the depreciation of 1922, and it has not been expended; and I think I can show that for 1923 about one-half of that item is in these estimates, but it is deducted again. It is in the estimates, and then it is deducted. It is a bookkeeping figure to a certain extent.

Senator HARRIS. While you charge that depreciation in for the one year, has it all taken place within the year, or is it the depreciation for several years?

Mr. FLINT. I really do not know about previous years, but these two years must have been charged in in 1922, and included in the details of the estimates; and then, as they do not expect to require it for immediate disbursement, they have deducted it.

Senator LENROOT. I find here, on page 286, the following: 1921, reserved for depreciation, \$435,000; 1922, reserved for depreciation, \$507,000. Estimated reserve for 1923, \$507,000.

Mr. FLINT. Yes, sir.

Senator LENROOT. That makes the total?

Mr. FLINT. The total of those two amounts.

Senator LENROOT. It seems to be a bookkeeping charge.

Senator WADSWORTH. But the money was appropriated, nevertheless. It is merely a bookkeeping allotment.

Mr. FLINT. The money was included in the estimates of the preceding year. For instance, for 1922 you might say it was included in the estimate, and they have an appropriation, but now it is deducted.

Senator LENROOT. In other words, you are using the reserve that has accumulated for two years for depreciation for expenses for 1923, and setting aside no new reserve for depreciation?

Mr. FLINT. Yes, sir.

Senator WADSWORTH. Is that reserve available for expenditure under the law?

Mr. FLINT. The 1922 amount is presumably available; but inasmuch as they did not expend it that year and do not expect actually to expend it, they are crediting it now in order to reduce the appropriation.

Senator LENROOT. If you set aside \$500,000 reserve for depreciation, can you use that for some other purpose?

Mr. FLINT. It was not specifically set aside, you see.

Senator LENROOT. That is it; that is right.

Senator WADSWORTH. What I want to find out is this: The appropriation for the current year, 1922, was fixed at a figure which would permit of the expenditure of \$500,000 for depreciation.

Senator LENROOT. Or a reserve fund.

Mr. FLINT. Or a reserve.

Senator WADSWORTH. Yes. Now, it was not spent, or it is not expected to be spent?

Mr. FLINT. No, sir.

Senator WADSWORTH. Is that \$500,000 available under the law for expenditure in 1923 or does it automatically revert to the Treasury?

Mr. FLINT. No; it does not automatically revert to the Treasury; and inasmuch as it is not needed, they are frankly pointing out that they will not need it, and therefore deducting it from the amount now required.

Senator WADSWORTH. I am not at all discouraged by the net result of what is happening, but I want to get the system straightened out in my own mind. What is the life of an appropriation for maintenance and operation of the Panama Canal?

Mr. HARRAH. It is available until expended.

Senator WADSWORTH. That settles it. I thought it was one year.

Mr. FLINT. No. They are not fiscal-year appropriations; and this letter of the Secretary of War to which I referred will also explain that.

Mr. HARRAH. That is the reason why we can make these reductions—because of the fact that we have that fund on which to draw.

Mr. FLINT. And it is considered very important that our appropriations should be continuing, because of the business operations which we are carrying on.

INTEREST.

Senator WADSWORTH. Another item which you mentioned in accounting for this large reduction in maintenance and operation was interest received.

Mr. FLINT. No, sir; the mention of interest was merely interest received and turned into miscellaneous receipts. That does not go to our appropriation. That was in connection with the item read by Judge Harrah about the deposits in the Treasury, not available for expenditure by the canal.

Senator WADSWORTH. I see. That was mentioned, and it occurred to me to inquire from what sources they receive interest.

Mr. FLINT. Interest, licenses, taxes, fees, fines, etc. The only source that I know of, so far as interest is concerned, in connection with Canal Zone funds proper, as distinct from Treasury funds, is this: The Canal Zone, for instance, conducts the post offices there, and has a postal deposit system. Those postal deposits are Canal Zone funds that can be drawn out by employees whenever they want to; but they accumulate, and an arrangement has been made whereby those funds are deposited in banks at interest until they are called for, and I am pretty sure that is the item of interest. That is the only item of interest that I know of.

Senator HARRIS. How much is that item?

Senator WADSWORTH. It runs about \$210,000 a year.

Mr. FLINT. Not for interest altogether. That is for licenses, taxes, fees, and fines. The amount for interest is not separately stated there.

Mr. HARRAH. Of course they cover into the Treasury to the credit of "miscellaneous receipts" all the money that they receive in the Canal Zone for automobile licenses and licenses of every kind in connection with the Government down there, and if they receive any taxes of any kind they are covered into the Treasury to the credit of "miscellaneous receipts."

Senator WADSWORTH. Just as are the tolls?

Mr. HARRAH. Just as are the tolls, and also any fees that they receive in connection with the civil government go into the Treasury to the credit of "miscellaneous receipts." It is not used as a revolving fund at all, and any fines go in, and, in fact, everything that is collected in connection with the local government there goes into the Treasury to the credit of "miscellaneous receipts."

Senator HARRIS. Are any of the employees interested in the fees?

Mr. HARRAH. No.

Mr. FLINT. I do not think so. All fees are collected by the Government, and turned in as Government fees.

Senator LENROOT. I should like to ask you a question about what appears on page 286. First, here is a deduction of \$2,000,000 in the estimate on account of material and supplies—\$1,000,000 during 1922, and \$1,000,000 during 1923. How does it come that they evidently estimated for 1923 \$1,000,000 more than they needed, and then they go and deduct it?

Mr. FLINT. I presume that is on the principle that they are supposed to show in their estimates the total amount of business for which they need money, and then they make the deductions to show the net amount required. That is something like this depreciation account. I should say. They have figured that they will need for supplies a certain amount, but this \$1,000,000 can be deducted, because instead of buying those supplies they will use their surplus.

Senator LENROOT. Does that mean that you will reduce \$2,000,000 from the stock on hand that normally ought to be kept on hand?

Mr. FLINT. That is what I understand; yes, sir.

Mr. HARRAH. I do not understand it exactly that way. I think they became overstocked, due to the fact that there was a very large business transacted in 1920, and by buying they have become overstocked to some extent, and it is the intention to utilize this stock in 1922 and in 1923.

Mr. FLINT. Oh, yes; I think I was mistaken in that.

Senator HARRIS. What is the stock valued at after the depreciation?

Mr. HARRAH. I do not know that.

Mr. FLINT. The total stock they have on hand?

Senator HARRIS. Yes.

Mr. FLINT. I do not know what their total stock on hand is.

Senator LENROOT. What is that stock; what is its nature?

Mr. FLINT. It would be material and supplies purchased to go into stores for use in their shops, the mechanical division, in connection with the work done on ships, steel, and supplies that have been purchased for resale, some of them, to ships, like rope and paint and all sorts of material that we keep in stock for sale; and

the slump in business developed that they had accumulated more stock than they need to carry. It is not moving as fast as it used to; and I was mistaken when I said that this figure of \$1,000,000 was included in the estimate. I now recall that this is entirely an amount that they expect to realize from stock already on hand. It is not a bookkeeping figure. It is actually reducing their stock, and as they reduce the stock they are crediting the amount they expect to realize from that procedure in reducing the appropriation.

Mr. HARRAH. In other words, if they did not have the stock they would have to buy it and have to have more money.

Senator LENROOT. Then I say the purchase of that stock would have to be estimated for before you could get a reduction.

Mr. FLINT. This is stock on hand.

Senator LENROOT. I know, but in order to get a reduction it would seem to me there ought to be somewhere in these estimates a like amount estimated for the purchase.

Mr. FLINT. Not for this year, as I understand it, because if we have the stock on hand we turn that into cash.

Senator LENROOT. You are now getting to something. You sell the stock?

Mr. FLINT. Oh, yes; we sell the stock.

Mr. HARRAH. Or use it?

Mr. FLINT. We sell it or use it.

Senator LENROOT. If you use it, it would be here estimated for. It would have to be estimated for to get a deduction on it.

Senator WADSWORTH. I do not understand that you are going to sell any of this surplus stock under the heading of maintenance and operation on the canal, but you are going to use it up in your own maintenance and operation work.

Mr. FLINT. Some of it will be sold. We bought it to sell or use. A lot of that will be sold.

Senator LENROOT. If you get a reduction, there should be an estimate here for buying it. I do not find that estimate.

Mr. FLINT. If we have the stock already on hand there is no need of an estimate to buy it.

Senator LENROOT. If there is no estimate for buying it, I do not see how you get a reduction.

Mr. HARRAH. I think I can explain it. That is page 288. First we estimate that we need for expenditures from the Treasury \$6,635,404 for 1923.

Senator LENROOT. Yes.

Mr. HARRAH. We need that from the Treasury. Now, if we did not have any stock on hand at all we would have to have that much money.

Senator LENROOT. Certainly.

Mr. HARRAH. In 1920 and 1921, in making the estimate for what we would need, probably the estimates were higher than the actual business justified, and in purchasing stock to meet the expected business which did not develop, they purchased more stock out of those appropriations than they needed for the business that actually developed.

Senator LENROOT. I understand that Judge. I understand where you sell that stock and get money for it it can be used for a reduc-

tion, but where you use the stock I do not see how it can be used for a reduction unless you estimate for it.

Mr. HARRAH. It was bought out of the appropriations for 1920 and 1921. Now it is still available and so we reduce the amount that we would have to estimate for.

Senator LENROOT. Provided you sell it and get money for it.

Mr. HARRAH. But if we sell it and get money for it we would have to buy other stock.

Senator LENROOT. If it was estimated for, but it is not estimated for. I do not find any estimate here for stock anywhere.

Senator WADSWORTH. The criticism is not in the net result to the Treasury, as I understand Senator Lenroot's question. It is that Congress has no means of knowing the value of the stock that you are going to use; therefore, has no means of knowing what it actually costs to maintain and operate the Canal.

Mr. HARRAH. We have estimated the value of the stock we are going to use in 1922 will be \$1,000,000, and in 1923 \$1,000,000.

MATERIAL AND SUPPLY.

Senator LENROOT. Here on page 286, under the heading of "material and supplies"——

Mr. HARRAH. Page 286 or 288?

Senator LENROOT. The summary of the estimates and expenditures material and supplies, \$5,136,000, and then you deduct. Can you tell me what makes up that \$5,136,000?

Mr. FLINT. Yes; there is in the estimate a payment for material and supplies at pages 283 and 284. There is a total estimate for total material and supplies of \$5,136,451.

Senator LENROOT. That is right.

Mr. FLINT. Of course, that is based on purchasing material partly for the work of the Canal and partly for work to be done and stock to be used repairing vessels and other things.

Senator LENROOT. Then it is in the estimate?

Mr. FLINT. It is in the estimate. Of course, as I explained before, Senators, we are a little at a disadvantage in attempting to explain this estimate for maintenance and operation. The governor is asking for certain changes and I have come to explain those. Really the governor would be the one to answer all these questions, or some one from the Isthmus.

SANITATION, HOSPITALS, ETC.

Senator WADSWORTH. Let us inquire again as to sanitation and hospital work. You asked originally in the House an appropriation of \$550,000.

Mr. FLINT. Yes, sir; we are now asking for that; originally it was \$608,400 in the Budget estimates.

Senator WADSWORTH. How seriously would the hospital and sanitation work be affected if the appropriation stood at \$500,000?

Mr. FLINT. Well, from the fact the governor has twice urged that the amount be increased at least by that \$50,000, I would assume that he feels it would be a serious matter if he did not get it. I asked him if the estimate were cut from \$608,000 to \$550,000, that

he is now asking for, where the reduction would be made. Now I have a statement from him saying that the cut in the estimates from \$608,000 to \$550,000 and the reduction of \$50,000 in estimated collections would be carried by reductions in expenses distributed through various units, as follows:

Salaries.....	\$9,000
Wages.....	40,000
Material and supplies.....	30,000
Savings during 1922.....	20,400
Total.....	108,400

There is another item that comes in there, an estimate of a reduction of \$50,000 in collections. Instead of collecting \$700,000, his estimate now is \$650,000. That alone would justify the increase now requested.

The estimate that the collections will be reduced is based on actual figures and I have been referred to a statement for the month of January that is sent up by the Isthmus showing in detail their collections, which shows that the total for the month of January was \$55,189.95, and I have since received reports for February showing the collection for February of \$51,770. Now, at that rate the total collection will be less than \$650,000, but I suppose averaging them he is now figuring that the collections will only be \$650,000, and inasmuch as the estimate shows \$700,000 there alone is an item of \$50,000.

One of the serious things about the appropriation running short is that there are always outstanding bills against other departments at the end of the year, and while they are collected as fast as they can be it is always a factor that has to be considered at the end of the fiscal year in order to have enough money in the appropriations to pay the salaries and wages for the month of June, or even for May, and I have an estimate here showing that at the present time the outstanding bills under the sanitary appropriation against the Army are \$45,000; against the Navy, 25,000; and against the Republic of Panama, \$75,000. This last item is for current bills, in addition to the old bills.

That business has to be carried out of this appropriation. You see, we perform the service, for instance, in hospitals or in sanitary work, and have to pay our force and yet the collections will not come in till later.

Of course, there is always, I suppose, some margin to cover those collections, but it will be a serious matter if we run short in that appropriation.

Another thing the governor wanted me to impress upon the committee is this: That the Panama Canal does not spend money just because it has it at the end of the year. We are not on a fiscal year basis, and there is perhaps not that temptation to spend the money; anything that is saved goes over to the next year and there is never any attempt to spend money just because it is in the appropriation.

I know that the previous governors from General Goethals down to General Harding and Colonel Morrow have always watched expenditures and have played fair, as they have said, with Congress in that respect. And the governor wanted me to assure the committee that if the money is not needed it will not be spent, but he does not

feel safe toward the end of the fiscal year. If that appropriation should run short there would be serious difficulty. And, of course, he does not want to come in with deficiency estimates, because under the law he has got to know what he is going to have for the fiscal year at the beginning of the year to make his allotments.

Senator WADSWORTH. As I understand it, he thinks he will have to spend actually the receipts which are estimated at \$650,000.

Mr. FLINT. Yes, sir.

Senator WADSWORTH. And the appropriation direct of \$550,000, which is a total of \$1,200,000.

Mr. FLINT. If this \$550,000 was allowed, the actual total available for expenses would be \$1,375,000; then deduct the estimated collections, \$650,000, and it would leave \$725,000. From that, though, a deduction is also made of \$175,000 for old debts of Panama, which we are hoping will now be paid. Panama got behind very much in its financial dealings with us, but we think now we can count on getting that money during the next fiscal year. Therefore, that is another item where they frankly point out a receipt that is deducted from the total estimates to reduce the appropriation.

Senator LENROOT. No part of this appropriation or of your expenditure goes to the \$300,000 for La Pita Point?

Mr. FLINT. No, sir; this is sanitation. That La Pita Point work comes under maintenance and operation. The expenditure as shown in the estimates is for sanitation, hospitals, and quarantine.

Senator WADSWORTH. The next item.

CIVIL GOVERNMENT.

Mr. FLINT. Now, the next item, Mr. Chairman, is the civil government, which we desire increased to \$950,000. The amount in the House bill as passed is \$915,000. The original estimates for civil government amounted to \$991,815 and were reduced by the Budget to this estimate of \$973,340.

In regard to those items I would like to quote from the governor's cable when the amount carried in the bill was first reported to him. He said:

Endeavor to have increased civil government Panama Canal and Canal Zone to \$950,000. Essential that civil government be increased to amount stated to provide necessary facilities, which have run down through failure to appropriate for necessary requirements for past four years, for general material, supplies and repairs, and for replacements of equipment for fire service. It is impacticable to continue civil government expenditure at rate of expenditure for 1922. Both these services were carefully considered in Budget office with data at hand last fall. Later data enables me to agree that their recommendations can be reduced to figures above given, but to advise that any further cut can be accomplished only by abandonment of some necessary service.

When the governor received information as to the amount finally in the bill, \$915,000, as passed in the House he cabled again:

Civil government, Panama Canal and Canal Zone, additional amount required at least \$35,000 for following purposes: Repairs to post offices, \$2,500; repairs to school buildings, equipment, and furniture, \$8,000; repairs to police station, \$2,500; buildings in very bad condition and real economy calls for much larger sums; new fire equipment, \$7,500; additional teachers for colored schools, including increased pay as directed by Secretary of War, \$8,000; additional for police force, \$6,500.

That makes a total of \$35,000 additional and brings the appropriation desired up to \$950,000.

The estimates show that there was expended for civil government in the fiscal year 1921, \$999,205.27 and the estimated expenditure for 1922 was \$918,320. Now, the governor stated in his cable that they can not keep within the same amount as the estimated expenditure for 1922, that is, \$918,320, and I would like to read an extract from his statement when he sent up the estimates totaling for civil government \$991,815. He says:

No funds whatever will be available from the present appropriation—

He means at the end of this fiscal year—

as the total available for the present fiscal year is only \$918,320. The amount expended during 1921 was \$999,205.27, and it will not be possible to reduce the expenses for 1923 to the amount available for 1922 without serious effects upon the schools and postal system and reduction in the police and fire-protection forces, which will seriously affect the protection of life and property on the Isthmus.

Senator HARRIS. He spent nine hundred and ninety and odd thousand?

Mr. FLINT. Yes, sir; in 1921.

Senator HARRIS. Where they were giving him \$918,000?

Mr. FLINT. Yes; that is all that is available for 1922, and he has now applied twice for this increase to \$950,000 for 1923. That appropriation has always been pruned down very severely by Congress—that is, as compared with the estimates—not allowing anything for new work, new buildings, or even for repairs. They have to cut down the repairs. Now, that is one of the principal reasons why the governor feels they can not keep within the same figure for 1923 as available for this year.

In a personal letter to me he says:

It should be explained that these two appropriations—that is, sanitation and civil government—are the ones that have been most cramped within recent years, that practically all savings effected operating to reduce our estimates so much this year are in maintenance and operation, and that at the beginning of the fiscal year 18 months ago the official in charge of our civil-government affairs, in submitting his plans for getting along on the limited appropriation, stated that he could do so by absolutely cutting out all upkeep repairs on his post offices, etc.—

That was last fiscal year. He had to do that again this fiscal year, even with that \$918,000—

This he has been forced to do for about two years, but, as I stated before, the highly stretched elastic may break.

The governor is fearful that if he does not get the amount now asked there will be serious damage to buildings; and then some of it is needed for the purposes listed in his cable.

Senator WADSWORTH. I notice that some of it is needed or asked for to increase the salaries of some school-teachers.

Mr. FLINT. Colored school-teachers; yes, sir. They have been paid very small salaries comparatively, and even under this they will not receive large salaries. The number of school-teachers is also to be increased, because it was found they were not giving the colored population there sufficient teachers.

Now, the increase is to be: Principals at the various colored schools shall be paid \$960 a year, and the other teachers from \$750 for the

first year to \$900 after three years. Those will be the maximum salaries for colored school-teachers. This includes eight additional teachers, as well as something to go toward the increase in salaries.

Senator LENROOT. I notice there is an increase for white teachers as well. Is that for colored schools?

Mr. FLINT. White teachers are for the white schools generally.

Senator LENROOT. Extra pay for 10 teachers of white schools.

Mr. FLINT. The pay of teachers is based, under the authority of the Panama Canal act, on the pay of teachers in the District of Columbia plus 25 per cent, which is authorized by the Panama Canal act for all pay in the Isthmus.

Senator LENROOT. So this extra pay becomes statutory pay that they are entitled to?

Mr. FLINT. In a sense they are entitled to it, but if we do not have the money—

Senator LENROOT (interposing). If they are entitled to it by statute it makes no difference whether you have the money or not.

Mr. FLINT. They are entitled to it.

Senator LENROOT. By law.

Mr. FLINT. Well, the governor fixes the pay based on—

Mr. HARRAH. The Panama Canal act provides it may be.

Senator LENROOT. Then it is not statutory.

Mr. HARRAH. No, sir.

Mr. FLINT. No; it is authorized to that extent. I should not say it is statutory, but it is authorized by the Panama Canal act to be paid at 25 per cent above the pay in the District of Columbia, and for several years that is the policy that has been adopted with the knowledge of the appropriation committees and with the approval of the Secretary of War, at 25 per cent above the District of Columbia pay.

Senator WADSWORTH. Are there any questions you care to ask on that item, Senator Harris?

Senator HARRIS. No.

Senator WADSWORTH. Is there anything else on that item?

Mr. FLINT. No.

CHANGES IN LEGISLATION.

The other matters I wish to bring to the attention of the committee are changes in legislation in the bill. In the first place, I want to call attention to the title of the bill, which reads:

Making appropriations for the military and nonmilitary activities of the War Department for the fiscal year ending June 30, 1923, and for other purposes.

And lines three to six of the bill contain similar language.

This is the first time that the Panama Canal appropriation has been connected directly or indirectly with the War Department. It used to be in the sundry civil bill. The Panama Canal is not a part of the War Department, and in this connection I would like to read a cable received from the governor regarding that feature. He says:

Suggest amendment H. R. 10871 by insertion "and the Panama Canal" in title and in line 5, page 1, after words "War Department," and insert "Title III" on line 10, page 128.

That is so as to make the Panama Canal come under a ^{separate} title and not be under title No. 2, which reads, "Nonmilitary activities of the War Department." The governor goes on to say:

Panama Canal was created by special act of Congress and placed under jurisdiction of President. President has administered Panama Canal through Secretary of War personally and all Executive orders and laws have heretofore considered Panama Canal as independent establishment. To prevent any misunderstanding and attempt to apply general laws intended only for War Department proper including such limitations as found on page 5, lines 18 to 21, amendment of bill should be made.

And the Secretary of War has indorsed that recommendation. While this bill does not necessarily change the fundamental law and make the Panama Canal part of the War Department, there should not be any misunderstanding on that subject, and furthermore there probably are limitations in the bill as it is now drawn which were not intended to apply to the Panama Canal. There never have been similar limitations heretofore and there would always be danger if we were considered part of the War Department that there might be some law applicable to the War Department which, while never intended to apply to the Panama Canal, might be construed to apply. The Panama Canal under the Panama Canal act and the appropriations for the Panama Canal limitations have always been included under the heading "Panama Canal."

Senator LENROOT. Can you point out any limitations that would affect the Panama Canal? That on page 5 does not.

Mr. FLINT. That does not, except for the possible misunderstanding. Of course, here it says "any civilian employed in the War Department." At first the governor had the feeling that if the canal remained as one of the nonmilitary activities of the War Department it might be construed that a provision of that kind would apply to the canal. I do not think it would strictly, but there is danger of things of that nature slipping in, and as the Panama Canal is a separate entity, although under the supervision of the Secretary of War, it is not felt that it should come within that category of a nonmilitary activity of the War Department. It is under the personal supervision of the Secretary of War.

Senator LENROOT. It would not any way under that language, because the words "for other purposes" would go outside of those military and nonmilitary activities of the War Department.

Mr. HARRAH. But the language of the appropriation on page 1 of the bill is that—

The following sums are appropriated, out of any money in the Treasury not otherwise appropriated, for the military and nonmilitary activities of the War Department.

Mr. FLINT. There we desire to insert "and the Panama Canal." showing the separate entity.

There is no question about the Panama Canal being under the personal supervision of the Secretary of War, and very properly, but we certainly do wish it to be considered as a bureau of the War Department.

Senator WADSWORTH. The same observation might be made about other things in this bill. For instance, the national homes for disabled volunteer soldiers, which are not even under the jurisdiction or supervision of the Secretary of War and have nothing to do with

the War Department, except that annually the Secretary of War sends an Army inspector to inspect the homes and he makes a report. The homes are governed by a board of managers, of which the President is a member ex officio and the Secretary of War is a member ex officio and there are five other members selected by Congress and the chairman of the board is elected by the board, and he is one of the members elected by Congress, and yet those homes are in here.

Senator LENROOT. If it said "War Department and other purposes herein specified," that would cover it all.

Senator WADSWORTH. You mean in the title, the first section?

Senator LENROOT. The first section. The title is all right.

Military and nonmilitary activities of the War Department and other purposes herein specified.

Mr. FLINT. That might cure the question of coming under nonmilitary activities in the title if the preamble of the bill is also changed, but there are other things in the act that I think should be considered as to whether it is intended to apply them to the Panama Canal; and right here I would like to suggest that at the end of the provisions, after line 9, page 128, just preceding "the Panama Canal," there should be inserted this section:

None of the limitations on the use of the foregoing appropriations made in this act shall apply to the appropriations for the Panama Canal.

If there are any provisions, then, either in this act or any subsequent appropriation acts, where that language might be followed, there would be no question that they would not apply to the Panama Canal unless specifically made to do so and similar limitations put under "the Panama Canal."

Senator WADSWORTH. Can you point out any dangerous provisions?

Mr. FLINT. Yes; I have a memorandum about some of the provisions of this bill. On page 27, lines 11 to 21, it reads:

None of the funds appropriated in this act shall be used for the payment of expenses of operating sales commissaries at which the prices charged do not include the customary overhead costs of freight, handling, storage, and delivery, notwithstanding the provisions of the act of July 5, 1884.

None of the funds appropriated in this act shall be used for payment of expenses of operating any utility of the War Department selling services or supplies at which the cost of the services or supplies so sold does not include all customary overhead costs of labor, rent, light, heat, and other expenses properly chargeable to the conduct of such utility.

Now, those particular provisions may not harm the canal, but I think when they were framed they were not intended to apply to the Panama Canal. "Any utility of the War Department" would exclude us so long as it is clearly understood putting us under the head of nonmilitary activities of the War Department does not make us a part of the War Department. If there is no question about that, that provision would not hurt.

Senator LENROOT. The first paragraph would apply to you.

Mr. FLINT. Well, is it intended? As a matter of fact, it would apply, yes. Now, I say, was it intended to apply? When those things were framed they undoubtedly had in mind changing the present system of Army commissaries. We have commissaries on the Isthmus, and actually we have always done these things; so if it did apply, that particular thing might not hurt anything so far

as we are concerned, but I am questioning that as one of the things that is apt to slip into a bill intended to apply to the War Department but not to the canal necessarily.

There is another provision on page 36, lines 20 to 25, and line 1 of page 37:

That no money appropriated by this act shall be expended for the hire, operation, maintenance, or repair of any motor-propelled vehicle which shall be employed wholly or in part for personal, social, or similar use, except such use as is prescribed by order for the transportation of Army personnel in connection with the recreational activities of the Army.

Now, that would apply to the canal as it is. I do not know that it would do any harm; I do not know that they are using any automobiles there for personal service, except perhaps the governor, as I think he stated in the hearing before the House committee; he sometimes uses his machine to go out to the golf course, although he has his own personal machine. If this law were actually to apply, he would have to be careful to use only his personal machine.

Senator LENROOT. I think it might be applied. The Secretary of War might be inclined to make an order affecting the canal.

Mr. FLINT. Yes; unless we get something excepting the canal, something may slip through unintentionally.

Now, on page 101, line 24, extending to line 3 of page 102, there is this provision:

No part of the moneys appropriated in this act shall be used for paying to any civilian employee of the United States Government an hourly wage or salary larger than that customarily paid by private individuals for corresponding work in the same locality.

Senator LENROOT. That would apply to you.

Mr. FLINT. It would apply as it is, but I do not think it is intended, in view of provisions of the Panama Canal act. That fixed our wages, based on the pay in the United States plus 25 per cent. The basic law covers that. This was probably intended to cover arsenals, etc., and they probably did not have in mind the Panama Canal. That is just an illustration.

Senator LENROOT. The next paragraph.

Mr. FLINT. Yes.

All material purchased under the provisions of this act shall be of American manufacture, except in cases when in the judgement of the Secretary of War it is to the manifest interest of the United States to make purchases abroad, which material shall be admitted free of duty.

That would apply as it is. It might not do any harm, because actually we do limit our purchases, except in extraordinary cases, to American manufactures; but was that intended to apply to the Panama Canal?

Senator LENROOT. Is that part of it—the purchase of material—under the supervision of the Secretary of War?

Mr. FLINT. Of course, if any question came up that was necessary to refer to the Secretary of War in connection with any purchase, or anything like that, it would go to him, but ordinarily the Governor of the Panama Canal has authority under the law to make purchases.

Senator LENROOT. But the Secretary of War would have the right to make such an order?

Mr. FLINT. Yes. As it is now, in case of open-market purchases above a certain amount authorized by law we must get the approval of the Secretary of War. The Secretary of War has authority over the Panama Canal as to large policies, but, of course, they are not handled in the War Department. They go from the governor to our office in Washington or direct from the governor to the Secretary, and while that provision alone may not do any harm, I do not think it was intended to apply to the Panama Canal when it was put in.

Senator HARRIS. You are complying with the spirit of that law?

Mr. FLINT. Yes; as a matter of fact, there was a separate law passed as to the Panama Canal during construction that no purchase of material of foreign production should be made unless the bids for American material were considered exorbitant; and that law, while it applied to construction, we are applying the principles to maintenance and operation.

Mr. HARRAH. On page 103—

Mr. FLINT (interposing). That provision relating to use of stop watches was not in the House bill, but was put in on the floor of the House that "no part of the"—

Senator LENROOT (interposing). It is unnecessary to read it.

Mr. FLINT. That was made to apply to the War Department, and they did not have in mind the Panama Canal. But it is an illustration of one of those things that might be put in even at the last moment, such as on the floor of the Senate, when there is no chance to bring in representations to show that it should not apply to the Panama Canal. If a provision like that previously suggested is inserted, though—I would like to read that again and recommend it—just before the heading "The Panama Canal," and following line 9, page 128:

None of the limitations on the use of the foregoing appropriations made in this act shall apply to the appropriations for the Panama Canal—

and if the committee thinks it is not necessary to have a separate title for the canal, that would cure it.

We connected with the canal did not realize the status of some of these other organizations that are put in as nonmilitary activities of the War Department. If that is the construction—that it would not affect us, and would not put us under the War Department—we do not have any special objection to being under title 2, but it is hoped the provision just suggested will be inserted.

Mr. HARRAH. We have always kept the Panama Canal separate, and it was made separate by a special law; and it seems to me there ought not to be any legislation which might make its status doubtful, because it would be a very serious matter.

Mr. FLINT. Now, on page 131 of the bill, lines 8 to 11, the following provision is contained:

No part of the foregoing appropriations for the Panama Canal shall be used to pay the salary for any position at a rate in excess of the rate in effect for such position on June 30, 1921.

As to that the governor says in his cable:

Ask to have new paragraph as to increased salaries eliminated. While this is aimed at January increases of officials, it would also affect many nonofficial increases made necessary by increased duties and responsibilities of positions as well as increases made in conformity with the policy of paying to certain

classes the full 25 per cent above States rates, and would be most unjust to all and nullifies the exceptions allowed by the emergency provision.

The emergency provision there referred to is in the next paragraph in the bill.

After the governor found that that had not been eliminated in the House he also cabled again:

Also request that salary limitation be eliminated and clause relative permanent operating force be reinserted. Consider Panama Canal act sufficiently limits amount of compensation, especially since charges are made for rent, etc.

Now, what led up to the insertion of that provision was probably the fact that the governor did, on January 1, 1922, increase the salaries of about 19 of the principal officials on the Isthmus.

Senator HARRIS. How much did he increase them, do you know?

Mr. FLINT. Well, they were increased from \$25 to \$100 a month. I think \$100 was the maximum increase, and the reasons for that action are fully explained in a letter addressed by the governor to Mr. Anthony of the House Committee on Appropriations, to be found on page 510 of the hearings before the House.

Briefly, the reason for it was this: Neither during the war nor since have the salaries of these officials been increased. Effective January 1 last an Executive order was put into effect providing for the payment of rent by canal employees for the quarters they occupy. Up to that time they had been occupying quarters free. The general mass of the employees of the canal have had their pay increased as increases were made in the States right along; their pay has been adjusted from time to time several times, while this rent provision ought to have gone into effect, if the recommendation of the Panama Canal had been followed, before the employees were able to keep it from being done. An order was put into effect in 1915 at one time and was in effect only about a month, when it was rescinded. The canal has always felt since the commencement of operation when the construction days were over, in view of the construction days being over, that the employees should pay rent, but they were able to keep from doing it, notwithstanding their wages went up to meet increased cost of living based on the rates of pay in the United States. Of course, now they are beginning to go down, we make adjustments very promptly and the wages go down. We are constantly watching wages in the United States, but, as the governor points out, these particular officials not only did not get any increase during the war for increased cost of living, etc., but suddenly this rent rule was applied, and he felt it would be an injustice to them to have it apply to them, because they are not in the same class as the other employees who have had the increased pay. That is very fully explained in the letter from the governor.

One of the labor representatives was before the House committee after the governor's hearing, and he referred to this payment of rent, and so far as the officials were concerned, while he said that some of the employees felt a little sore about it, he himself felt it was proper. But I want to call attention to the fact that a table was inserted in his hearing before the House committee, at page 517, giving the cost of rent, water, and electric lights that would probably be paid by these officials, but he had those figures understated. He shows the increase in salaries of the officials and then what they pay

for rent, water, and electric light, but in connection with that the governor has sent me a new statement showing actually what the total expenses of these different officials for rent and allied charges were in the month of March, 1922, and I would like to put that statement in the record. The governor states these figures can be taken as an average, although they do not include all costs, as some of the officials are arranging for their own grass cutting.

Senator WADSWORTH. Put it in the record at this point.

Statement of charges made against employees for rent, water, electric current, and allied miscellaneous charges for the month of March, 1922.

	Rent.	Water.	Current.	Miscellaneous.	Totals.
Doctor Curry.....	\$49.50	\$2.00	\$4.00	\$13.05	\$68.55
E. Greene.....	36.00	2.00	6.00	8.20	52.20
Colonel Walker.....	76.00	2.00	11.50	13.32	102.82
Captain Jessop.....	69.50	2.00	11.50	7.98	90.98
R. K. Morris.....	60.00	2.00	11.50	5.00	78.50
Colonel Fisher.....	74.50	2.00	10.50	5.00	92.00
C. A. McIlvaine.....	60.00	2.00	10.50	5.00	77.50
Commander Ryden.....	59.00	2.00	10.50	5.12	76.62
S. W. Heald.....	78.00	2.00	4.00	18.59	102.59
R. W. Glaw.....	42.50	2.00	10.50	3.00	58.00
A. H. Mohr.....	51.00	2.00	10.00	3.00	66.00
Commander McNair.....	78.50	2.00	4.00	15.54	100.04
Commander Henderson.....	50.00	2.00	10.00	7.15	69.15
R. R. Watson.....	48.50	2.00	11.50	3.95	65.95
G. W. Greene.....	20.50	1.50	2.50	2.75	27.25
W. L. Hersh.....	39.50	2.00	11.00	4.14	56.64
Dr. W. C. Rucker.....	61.00	2.00	4.00	17.01	84.01
H. A. A. Smith.....	78.00	2.00	.....	.....	80.00
J. M. Pratt (February).....	33.50	2.00	10.50	.....	46.00

Senator WADSWORTH. Your contention is that the rent order actually decreased the pay of these men, which pay had not been increased during the war?

Mr. FLINT. Yes; whereas the other employees had benefited by increases right along.

Senator LENROOT. Does that include anybody but the high officials?

Mr. FLINT. This rent order?

Senator LENROOT. No; those whose pay was not increased?

Mr. FLINT. There is a list of the officials in this letter.

Senator LENROOT. They are all officials?

Mr. FLINT. Yes.

Senator LENROOT. It does not apply to the men at all?

Mr. FLINT. No. But the governor points out that the limitation would not only hit those particular increases, but it would affect some other employees whose pay might have been adjusted and, in fact, a few of them have been adjusted since June 30, 1921, on account of increased responsibilities and duties of their positions. In the readjustment going on on the Isthmus there is a realignment of duties in the case of such employees. The governor says:

There is inclosed list of positions, outside of those directly affected by the 25 per cent provision, which have been increased since June 30, 1921, and which therefore will be affected if the new paragraph is not eliminated. Before the end of the fiscal year there doubtless will be other positions in this class.

The paragraph should be elided from the bill, because it would be restrictive much beyond the evident intent of the committee when the paragraph was inserted, and, entirely aside from the January increases to officials, exceedingly harmful to administration. Even if Congress disapproves the increases

to officials, it would not be fair on that account to shackle us with such a far-reaching and unusual restriction.

Senator LENROOT. This language was contained in the Budget estimates, was it not?

Mr. FLINT. No, sir; it was not in the Budget estimate. You are probably reading the next clause, Senator, which I will come to.

Senator LENROOT. All right.

Mr. FLINT. This provision that I have been referring to was inserted for the first time this year. It is on page 131, lines 8 to 11, of the bill as reported in the House. Now, the next clause in the bill reads:

Except in cases of emergency or conditions arising subsequent to and unforeseen at the time of submitting the annual estimates to Congress, and except for those employed in connection with the construction of permanent quarters, offices, and other necessary buildings, dry docks, repair shops, yards, docks, wharves, warehouses, storehouses, and other necessary facilities and appurtenances for the purpose of providing coal and other materials, labor, repairs, and supplies—

Right there the governor has requested that there be reinserted the provision which has always been in our appropriation bills since 1914, as follows: "and except for the permanent operating organization under which the compensation of the various positions is limited by section 4 of the Panama Canal act"—

there shall not be employed at any time during the fiscal year 1923, under any of the foregoing appropriations for the Panama Canal, any greater number of persons than are specified in the notes submitted, respectively, in connection with the estimates for each of said appropriations in the Budget for said year. nor shall there be paid to any such person during that fiscal year any greater rate of compensation than was authorized to be paid to persons occupying the same or like positions on July 1, 1921.

Senator LENROOT. Now, will you point out the difference between that prohibition and the first one you referred to?

Mr. FLINT. This says except in cases of emergency, etc., these appointments can not be made "nor shall there be paid to any such person during that fiscal year any greater rate of compensation than was authorized to be paid to persons occupying the same or like positions on July 1, 1921."

Senator WADSWORTH. Those are emergency employees.

Mr. FLINT. Yes; reference is made to the emergency employees. and then follows the clause "and all employments made or compensation increased because of emergencies or conditions so arising shall be specifically set forth, with the reasons therefor, by the governor in his report for the fiscal year 1923."

The governor is not objecting to that clause, because these changes he has made here will come either under the emergency clause or under this language that we desire reinserted in the bill "and except for the permanent operating organization under which the compensation of the various positions is limited by section 4 of the Panama Canal act."

Senator LENROOT. Is it your construction of line 25 that the words "such person" do not refer to the persons who may be in the permanent force but to persons employed under an emergency? It is a little blind there "any greater number of persons."

Mr. FLINT. It would apply to anyone included in the notes.

Senator LENROOT. It would apply to anyone in the notes?

Mr. FLINT. Yes, sir; but if this exception goes in, as it always has been in "and except for the permanent operating organization under which the compensation of the various positions is limited by section 4 of the Panama Canal act" it would not apply to those.

Senator LENROOT. If you think it does apply to those specified in the notes then I ask you again what is the difference between this prohibition and the first one you called attention to?

Mr. HARRAH. The difference is simply that under the first one you can not pay any more money than was payable on June 30, 1921, in any event.

Senator LENROOT. I understand that distinction, of course. That is as to officials.

Mr. HARRAH. Yes.

Mr. FLINT. On the second one we can make increases for emergencies and also in the permanent operating organization provided for by the Panama Canal act, if that clause is inserted again. We feel that that clause is probably eliminated in view of the desire of the committee to prevent increases such as the governor made and explained in his letter. But that clause, at least, should go in again, otherwise there might be some question as to whether we could even make the increases already authorized by the Panama Canal act. It excepts those positions.

Senator LENROOT. The first paragraph which you object to contains the words "actually paid on June 30, 1921, shall govern thereafter," while under the one now under consideration it is the rate authorized to be paid on June 30, 1921, although they might be paid a lower rate; is that right?

Mr. FLINT. Yes; they might be paid a lower rate.

Senator WADSWORTH. I was absent for a moment. Was it brought out how many of these officials under the first paragraph, lines 8 to 11, would be adversely affected?

Mr. FLINT. Nineteen referred to in this letter, and in addition the governor points out that it would prevent any other changes that he might want to make in the organization as the result of increased duties or responsibilities of employees. It would affect any change at all.

Senator LENROOT. Are there maximums now fixed in the basic law for these positions?

Mr. FLINT. Well, the maximum is fixed by the Panama Canal act.

Senator LENROOT. I say, they are fixed for these various positions?

Mr. FLINT. No; they are not specifically appropriated for.

Senator LENROOT. I did not say that.

Senator WADSWORTH. In the Panama Canal act are they fixed maximums?

Mr. FLINT. Well, that 25 per cent clause practically fixes the maximum for any wage.

Senator LENROOT. But, of course, when you go to these higher positions really the 25 per cent clause does not mean very much, because there is no such thing as scales of pay for those positions.

Mr. FLINT. Well, the governor in his letter states:

The increases given to the various officials are in no case greater than would have been granted them during the period of rising wages had rent been effective as it should have been right along, and are, in practically every case,

insufficient to meet the rental and other charges, and are not in excess of 25 per cent above States rates for similar services.

Senator HARRIS. I would like, if you can gather it for us, for you to let us know how much the cost of that repair work you are doing is, and how much the expense of it is.

Mr. FLINT. Of course, it varies every year according to the amount of work done.

Senator HARRIS. I want to know for each year for the past three or four years.

Mr. FLINT. How much has been expended?

Senator HARRIS. All the expenses for repair work and then how much the income.

Mr. FLINT. Repair work for vessels?

Senator HARRIS. Yes; and all other repair work for the public.

Mr. FLINT. I will probably have to cable for those figures and get them from the auditor's office.

Senator HARRIS. It is not necessary to cable for it, if you can give me that when you get it.

Mr. FLINT. That is, if I can not put it in the hearing, I will communicate it to you?

Senator HARRIS. Yes.

Senator WADSWORTH. Do you care to ask any more questions about this?

Senator HARRIS. No.

Senator WADSWORTH. Is there any other item you want to bring up?

Mr. FLINT. No, sir; I have touched on all the items.

Senator WADSWORTH. Thank you very much.

STATEMENT OF COL. ROBERT C. DAVIS, ACTING THE ADJUTANT GENERAL.

The CHAIRMAN. What is your first item, Colonel?

MILITARY POST EXCHANGES.

Colonel DAVIS. It is on page 8, military post exchanges. The amount of money which is appropriated in the House bill is \$75,000, and there is a proviso therein that not to exceed \$15,000 may be expended for libraries and not to exceed \$35,000 for the hostess houses.

The War Department submitted two estimates totaling \$200,000 for these two services. Of this \$200,000, \$30,000 is for the repair of the buildings, post exchanges, and the buildings located on the permanent posts. Twenty thousand dollars is for the purchase of magazines, to provide magazines and newspapers in hospitals for the sick and in the 206 libraries or reading rooms within the limits of the United States and on foreign service. That leaves \$150,000, of which \$60,000 is for the conduct and maintenance of libraries and \$90,000 for the pay of hostesses.

LIBRARIES.

Of the \$60,000 for the libraries, \$15,000 is for the purchase of books. The American Library Association and others have given

to the service approximately 1,500,000 books. We have to have replacements, and it is desired also to get some of the new books as they come out. These books are books of reference, for recreation, and for education. So that \$15,000 is the amount estimated for that.

Senator HARRIS. Fifteen thousand dollars of the \$60,000 is for books?

Colonel DAVIS. Yes, sir; the remaining \$45,000 is for the payment of the library personnel. In this personnel they have a development specialist, who is the librarian in charge. He is a man, Mr. Dickerson, more or less known nationally. He is on the national council of the American Library Association. He advises the War Department as to everything in connection with this library service.

Then there is a librarian in each corps area and in each department overseas.

In addition there are six librarians in the general hospitals. That is the overhead for the library service.

In the libraries throughout the service, the 206 libraries, and so on, the work is done by the enlisted men; but the preparation of lists, the instructions as to catalogueing and classifying, the training of the enlisted men in library duties, and other jobs are done by the librarian in charge of the particular corps area.

Senator HARRIS. These libraries are for the use of the enlisted men principally?

Colonel DAVIS. They are for the use of the enlisted men and the employees, officers, and everyone stationed at the different places.

In the United States, at places like New York, Brooklyn, and places of that kind, the per capita withdrawal per year varies from three to six books. In the Army posts it goes up to as high as 36 per capita, and averages 18.

We feel that it is necessary to give the men the opportunity to read, not only for recreation, but also for education. This work, of necessity, requires supervisors, and it has been reduced to the minimum that it is believed can handle it. We have the six hospital libraries, and it is necessary to have a librarian in those hospitals. That work can not well be done by the enlisted men. It requires men of technical knowledge. The taking of the books around to the beds, the selection of the particular kind of books that the patients will need, and work of that character requires special knowledge, so that in the six main hospitals we are asking for librarians. These librarians receive a less salary than the department or corps area supervising librarians.

HOSTESS SERVICE.

In regard to the hostess service, there are \$90,000 asked for for the payment of hostesses and the supervisors. We have a director of woman's relations in the War Department, who advises the War Department, both the first section of the General Staff and The Adjutant General, in connection with everything pertaining to woman's relations. In order to keep these supervisors at a minimum we have combined them and have one supervisor for the First and Second Corps, one for the Third Corps, one for the Fourth and Fifth Corps, one for the Sixth and Seventh, one for the Eighth by itself, one

for the Ninth by itself, and then the three for the foreign service departments.

Then, in each corps area, considering the number of men in the corps area, the hostesses or hostess aids are assigned. In a division there is a hostess and a hostess aid. Also at Camp Benning. This makes a total of 51, which makes a total cost of \$90,000, which we ask for.

Senator HARRIS. Are you getting good results from that service?

Colonel DAVIS. From my own personal experience, Senator, recently, when I was commanding officer at Plattsburg, N. Y.—and I think that my experience there is the average in the service—I should say so. I had command of a regiment and the post. There were very few things to interest or amuse the men. I had a splendid woman there as hostess. She started in to get the girls from the town to come out to the dances. She went down town and got in touch with the different women's civic societies that handle these matters, and through them we succeeded in getting a very fine class of young women. The hostess herself personally invited them; and if any young woman wanted to come to a dance, she would go to the hostess, who gave her an invitation, after looking her up and finding what kind of woman she was.

We had 165 married men in the organization. The hostess got in touch with their wives and families. She had several days, I think it was twice a week, when she would have all the women and the children come to the service club, and there have tea for them, and sewing, and the children entertained, and things of that kind.

When we had our smokers or boxing matches she would get the supper for the men and we would have sandwiches and coffee and things of that kind. On sundays she would have the men and their wives—anybody who wanted to—from the post come in and afford some kind of amusement for them. The work she did, from my standpoint as commanding officer, was simply invaluable.

Senator HARRIS. They are cutting it down from \$150,000 to \$75,000, and you want \$200,000?

Colonel DAVIS. We want \$200,000 in place of the \$75,000; and if you want to put the proviso in for the libraries, we are asking for \$60,000 and for the hostesses \$90,000.

As to the last proviso, that no person may be employed at a rate of compensation exceeding \$3,500, the development specialist who handles the libraries receives at present \$5,000. The same way, the director of woman's relations receives \$4,000. This proviso would reduce their salaries—the first one from \$5,000 and the second one from \$4,000—to \$3,500 each. I doubt very much whether the specialist in regard to libraries would accept that reduction.

Senator HARRIS. He gets \$5,000 now?

Colonel DAVIS. Yes. He is a man of a great deal of technical knowledge and, as I understand, of more or less national reputation.

Senator WADSWORTH. If you only had \$75,000, would you cut the libraries or the hostess houses?

Colonel DAVIS. I imagine we would have to make an equal reduction, proportionate to each. That is all we could do. I do not know how it would be cut. My personal desire would be to keep the hostess.

Senator WADSWORTH. Supposing you were confined to running the hostess houses, how much could be done, do you think, with \$75,000?

Colonel DAVIS. It would simply mean, Mr. Chairman, that we would have to cut out a certain number of hostesses—the difference between the \$90,000 that we ask for and the \$75,000, if it was all used for hostesses. The hostesses' salary is \$1,500; that is, for the hostess in a post.

Senator WADSWORTH. Are the magazines purchased for the hostess houses or the libraries?

Colonel DAVIS. For the libraries. In general, the libraries are in what they call the service clubs. They are a part of the service club. In all of the permanent posts there is a service club where you have your moving-picture shows and where you have your entertainments—your dances—and in addition to that usually there is a certain part of that building put aside as a library. There are only 43 separate library buildings.

Senator WADSWORTH. Of course, the \$30,000 you want for repair of buildings; and if you only had \$75,000 altogether you would have to use some of the \$75,000 for repair.

Colonel DAVIS. Undoubtedly, sir. Most of these buildings—these service clubs—are buildings that were turned over by welfare societies during and after the World War—turned over in 1919. Those that I have seen in a number of camps and posts, I know, have been badly in need of repair; and this estimate of \$30,000 is for no new construction, but simply to repair these service clubs that are now in existence and to keep them up. We have undertaken this work, and this appropriation—this estimate—is to carry it on.

Senator WADSWORTH. Have you any further questions to ask, Senator Harris?

Senator HARRIS. No.

Senator WADSWORTH. Have you something else to bring up, Colonel?

PAY OF WARRANT OFFICERS.

Colonel DAVIS. Yes, sir. The next item is on page 17 of the bill, warrant officers. [Reading:]

For pay of warrant officers, \$1,534,336.

There is this proviso:

That the sum herein appropriated for pay of warrant officers shall not be used for the pay of more than 40 warrant officers of the mine planter service.

WARRANT OFFICERS MINE PLANTER SERVICE.

This is the first proviso. The mine planter service has at present 79 warrant officers.

Senator WADSWORTH. We have had all that discussed by General Coe and by others.

Colonel DAVIS. Yes, sir. I was told that I was to discuss it, if you wanted me to. I can only support their recommendation. I know what their discussion was.

Senator WADSWORTH. And General McRae discussed it.

Colonel DAVIS. Yes, sir.

Senator WADSWORTH. The next proviso has not been discussed.

Colonel DAVIS. The next proviso reduces the number of warrant officers from 1,120, which was authorized in the act of June 4, 1920.

to 600. This number of 600 is apparently intended to be in addition to the warrant officers of the Army mine planter service, which was provided in the original act.

BAND LEADERS.

In the 1,120 warrant officers who are now authorized there are 115 who are band leaders. For these 115 we have 102 authorized bands in the service. We have 9 warrant officers at the school of music, so that makes 111. It only leaves 4 surplus warrant officers who are band leaders. If this proviso, reducing the number of warrant officers to 600 without authorizing reappointments, goes into effect, as the band leaders are retired there will be no authority to replace them, so that as time goes on you will have a situation where you have a number of bands without any band leaders. The War Department suggests that this proviso be changed to read as follows, beginning in line 2 on page 18:

Provided further, That except when necessary in order to provide qualified band leaders for authorized bands, no vacancies in the grade of warrant officer shall be filled until the number in such grade is reduced to 600, and thereafter the number shall not be increased above 600 in addition to those authorized for the Army mine planter service.

That is to say, you would have the Army mine planter service of 40—or, as I understand, the Chief of the Coast Artillery desired 50—and in addition to that you would have a gradual reduction to 600 warrant officers, with the additional fact that whenever a band leader who was a warrant officer retired you could replace him, but you could not replace any other warrant officer.

Senator WADSWORTH. You think you could not fill vacancies among the band leaders from the body of warrant officers?

Colonel DAVIS. No, sir; because the warrant officers who have been appointed were appointed from noncommissioned officers who had served as officers during the war, and a certain number were given to men with musical education; so that these other men would not be fitted. You could not transfer. In other words, there are in the list of warrant officers actually to-day 115 who are band leaders, and you have 102 authorized bands, and nine of them on duty at the army musical school; so that you to-day have only four surplus warrant officers capable of being band leaders.

Senator WADSWORTH. What have you to say about the reduction in the number of warrant officers to 600?

Colonel DAVIS. It is simply a question of accepting the reduction. The number that was authorized I think is necessary. They are all filling their positions, and they are assigned to the different services. But the idea was that we would accept this reduction if it is necessary to be made.

PAY OF ARMY FIELD CLERKS.

There is another item on page 19 with which the warrant officers are also associated, which I wish to discuss, that is the pay of field clerks.

Senator HARRIS. Before leaving that last item let me ask you this: You do not want to change the number of warrant officers that the law now provides for?

Colonel DAVIS. No, sir.

Senator HARRIS. You want to leave it as it is?

Colonel DAVIS. To leave it as it is; and if the reduction is made, then we ask that it be made as I have indicated.

Senator HARRIS. With this proviso?

Colonel DAVIS. With this proviso.

Senator WADSWORTH. Of course this proviso is an amendment to the basic law. The Army reorganization specifically states that there shall be 1,120 warrant officers.

Colonel DAVIS. Yes, sir.

Senator WADSWORTH. And this changes it and says that hereafter the number shall not be increased above 600.

Colonel DAVIS. Yes; it changes the act of 1920.

PAY OF ARMY FIELD CLERKS AND CIVIL SERVICE MESSENGERS.

Next, as to the item at the bottom of page 19, for the pay of Army field clerks and civil service messengers; we have in the service to-day 377 army field clerks. The act of 1920 provided that thereafter there should be no more Army field clerks appointed, the idea being that the warrant officers would gradually take over the duty performed by the Army field clerks. At that time there were 400. It was believed to be the intention of Congress to appoint to the warrant officer position, first, noncommissioned officers who had served during the World War, as officers who had long service, but were not quite eligible for appointment under the national defense act.

Senator WADSWORTH. That is true.

Colonel DAVIS. So that, therefore, the 1,120 warrant officers who were authorized were taken from that class. There is still a waiting list of several hundred.

Now, the next class to be appointed would be the Army field clerks. These men were made Army field clerks in 1916. Their status was changed from that of a civil service clerk; therefore they have lost the provision which gives retirement to civil-service clerks.

On the other hand, they can not retire. This is a reduction of this number of 377 to 230. Many of these clerks are men who are unable to be appointed warrant officers because of their age. There are some of them who are over 70 years of age and some of them who have served in the Government service as clerks or enlisted men for 40 or 50 years. So that we ask, in connection with this reduction here, that the number be reinstated that we now have, so that it would read, "Nine at \$2,000 each, forty-two at \$1,800 each"—

Senator WADSWORTH. Forty, is it not; they have made a revised estimate?

Colonel DAVIS. That was changed to 42.

Senator WADSWORTH. By the Budget?

Colonel DAVIS. Yes; I have that right here, I think. I find I did not bring it with me, but it was changed by a letter from the Budget officer to 42.

Senator WADSWORTH. I am just wondering whether you have any right to ask that that be more than 40. The Budget made it 40.

Colonel DAVIS. I have no right to ask it if the Budget estimate was 40.

Senator WADSWORTH. Unless there was a supplemental estimate raising it to 42.

General LORD. What is the question?

Colonel DAVIS. How many \$1,800 clerks does the Budget estimate show?

General LORD. Forty-three, it seems.

Colonel DAVIS. Can the Budget estimate be read? This is the amount that I understood was the Budget estimate, and also these are the figures that were advocated by General McRae. There is undoubtedly a mistake somewhere, Mr. Chairman.

Major MACKAY (reading):

Eight at \$2,000, forty at \$1,800, seventy-one at \$1,600, ninety-eight at \$1,400, one hundred and fifty-three at \$1,200, and 100 messengers at \$720 each.

Colonel DAVIS. I would like to ask, then, that the figures just read by Major Mackay be substituted for those that I suggested.

Senator WADSWORTH. All right. Now, as I understand it, one of the things that ought to be remembered in this connection is that these men having changed from the civil-service status to the semi-military status in 1916 will now lose the right of retirement which they would have had had they remained all these years in the civil service.

Colonel DAVIS. Yes; and they have no right to retirement in their present status. A bill was introduced, which received the support of the War Department, recommending that these men be given the right of retirement.

Senator WADSWORTH. The House bill would discharge 147 of them?

Colonel DAVIS. Yes, sir. These clerks are all badly needed. They are used at the corps headquarters.

The warrant officers who have been appointed are mostly men without clerical ability, so that they can not take over the work which is being done by these clerks.

The size of the Army does not affect their number very much, because the work that they are doing in the corps areas has to do, of course, with the Organized Reserve, the National Guard, the R. O. T. C., and activities of that nature.

Senator HARRIS. You regard it as a very important matter, then?

Colonel DAVIS. I do, sir.

Senator WADSWORTH. I notice in the House hearings that you have 12 Army field clerks who are over 64 years of age.

Colonel DAVIS. Yes. There are 14 Army field clerks who are past 64 years of age, or who are incapacitated for active duty. There are field clerks of the Quartermaster Corps in a similar status. For instance, there is one Army field clerk who has served almost 52 yrs.

The bill, which is House Joint Resolution 135, authorizing the appointment and retirement of field clerks, asks the retirement as warrant officers of Army field clerks and field clerks in the Quartermaster Corps whose status was changed from a civil to a military one by the act of August, 1916, and who because of their age or service or disability would be eligible for retirement on a status the

same as the warrant officers. The War Department advocated the passage of that act.

Senator WADSWORTH. Now, I will quote from the House hearings at which General Harris, your predecessor, testified. [Reading:]

Mr. ANTHONY. Did I understand you to say that if the number of warrant officers is decreased you could not decrease the number of field clerks?

General HARRIS. That is right.

Mr. ANTHONY. But if the number of warrant officers is permitted to stay as at present you could then decrease the number of your field clerks?

General HARRIS. Yes, sir. If the number of warrant officers remains the same, we could reduce the number of field clerks by 93 for an Army of 125,000, by 190 for an Army of 100,000, and by 303 for an Army of 75,000. .

Mr. STAFFORD. As I understand, you will be able to reduce them by these numbers?

General HARRIS. Yes, sir. It is a question whether we will reduce the number of field clerks or warrant officers. They are both performing the same kind of duties.

I suppose the general meant not exactly the same, but generally speaking.

Now, the House bill reduces them both?

Colonel DAVIS. Yes, sir; and there is another element in that, Mr. Chairman. The act of 1920 authorized a certain number of warrant officers. It contemplated that there would be no more of these Army field clerks.

Senator WADSWORTH. Yes.

Colonel DAVIS. But as stated, preference in appointment was given to the soldier who was an officer during the war.

Furthermore, there are a number of these Army field clerks who are over age and can not be appointed warrant officers. Therefore, the War Department proposition is to allow these Army field clerks to drift along and gradually become absorbed.

On the other hand, the warrant officers have not taken over all their duties, because many of these warrant officers are not men of clerical ability. Gradually they will become so.

Senator WADSWORTH. Yes.

Colonel DAVIS. So that it would seem best to allow the Army field clerks to gradually become absorbed.

Senator WADSWORTH. I think perhaps I made a misstatement a little while ago. I said, as I understood you to say, that this bill reduced the number of Army field clerks from 377 to 230.

Colonel DAVIS. Yes, sir.

Senator WADSWORTH. You asked for 370?

Colonel DAVIS. For 377.

Senator WADSWORTH. Three hundred and seventy would constitute a reduction of 30 from the authorized number, from this year.

Colonel DAVIS. From the authorized number at the time of the passage of the act, when we had 400 clerks. At the time the national defense act passed there were 400.

Senator WADSWORTH. Yes. At what rate do you think these field clerks would disappear from the service, lacking any other legislation?

Colonel DAVIS. There was a loss of 24 during the past fiscal year.

Senator WADSWORTH. Twenty-four have gone out during the last fiscal year?

Colonel DAVIS. Yes, sir.

Senator WADSWORTH. Do you regard that as an annual wastage?

Colonel DAVIS. I should think so, because these field clerks are mostly men of quite a lot of service, both in the Army and as clerks.

Senator WADSWORTH. But there is quite a percentage of younger men among them, as I have met them from time to time.

Colonel DAVIS. I think a great many of the younger field clerks took their discharge, Mr. Chairman.

Senator WADSWORTH. They did?

Colonel DAVIS. Yes, sir; they were in temporarily.

Senator WADSWORTH. You think the older ones stayed in in the hope that Congress would pass an act giving them retirement?

Colonel DAVIS. Yes; and they took that status and stayed, in hopes that Congress would take care of them and give them a military retirement.

Senator WADSWORTH. Is there anything else that you want to talk on?

Colonel DAVIS. No, sir.

(Thereupon, at 1.30 o'clock p. m., the subcommittee adjourned until 2.15 o'clock p. m.)

AFTERNOON SESSION.

The subcommittee reconvened, pursuant to the taking of the recess, at 2.15 o'clock p. m., Senator James W. Wadsworth presiding.

General LORD. Mr. Chairman, before starting in on pay, if it is agreeable to you, Col. John T. Axton, Chief of Chaplains of the Army, is here, as well as Dr. E. O. Watson, of the Federal Council of Churches, and they would like to discuss with you a reduction in the force of chaplains which would result from the House bill. They expect later Rev. Dr. Lewis J. O'Hern, who represents the archbishop of New York, and who will also address you in regard to the matter of chaplains in the Army and the Navy.

Senator WADSWORTH. Very well, we will hear Chaplain Axton now.

ARMY CHAPLAINS.

STATEMENT OF COL. JOHN T. AXTON, CHIEF OF CHAPLAINS, UNITED STATES ARMY.

Chaplain AXTON. The provision for the reduction of the number of chaplains in this act carries us from where we now stand, at 179 chaplains, down to 103.

May I preface what I have to say by this. I have just had the privilege of going over the religious work of the Army, passing from camp to camp, without expense to the Government—it was not a junket—and seeing the character of the work being performed by chaplains, the necessity for it, and how well the men are distributed. I can say to you very frankly that with the 179 chaplains we now have the field is not adequately covered.

We have in this country 95 camps, posts, and stations with chaplains. Of those there are 16 that call for more than one chaplain. They are large camps. Some of the garrisons being large, we have several chaplains at them; some of them as many as eight—Camp Lewis, Camp Dix, and Camp Travis.

Senator HARRIS. Did you say that they had as many as eight?

Chaplain AXTON. Eight; those three big division camps. We have tried always to keep a proper denominational balance in these larger places, so as to give the men opportunity for the exercise of their individual ideas along religious lines.

There are now about 18 posts that ought to have chaplains that are without them, some temporarily.

Senator WADSWORTH. What posts are they?

Chaplain AXTON. I think of Camp Normoyle, Fort Crook, and Fort Crockett.

Senator WADSWORTH. What is the number of men there?

Chaplain AXTON. From 300 to 500, requiring a chaplain. The distribution of the Army makes it difficult to take care of all these places. At places like Fort Riley, for instance, we have only one chaplain. That is a big center, and the commanding general says, and we are agreed, that it would be for the best interest of the service if we had two there. I assume from the recommendation of General Pershing that some new distribution of the Army is about to take place that will make it possible for us to cover the field with the number of men he recommends. His recommendation is that we should have 158 chaplains, but of that number 22 shall be absorbed by normal retirements and resignations from the service, the ultimate strength to be 136.

To follow this appropriation act would take out of the service immediately two-fifths of all the chaplains. They were all appointed upon the recommendation of their respective denominations after their World War records had been examined by boards of officers. They have all made the violent wrench from civil life to military life, have settled to the service, have gone through our training course, and so they are really trained men for the work. Out of all that trained personnel, two-fifths would be eliminated. If the normal number of separations from the service continues, next autumn there would be vacancies to be filled. This thing is worthy of a good deal of consideration.

A large proportion of the inquiries that come to the War Department concerning citizens' military training camps for the summer ask the question, "How is the moral well-being of the young men who go to these camps to be safeguarded?" The question comes up with the great majority of the parents about their boys and young men going to the camps, and we answer it always by saying that chaplains will be assigned to the camps. The camps this coming summer will take 52 chaplains for that work alone. They will be taken away from their normal duty temporarily. There are 34 chaplains serving outside of the continental limits of the United States—in the Hawaiian Department, in Panama and in the Philippines, Alaska, and Porto Rico; one in China, and four are in France. Those four in France were recently assigned to see that when reinterments are made in the permanent cemeteries they are conducted in an orderly way, with proper religious exercises, instead of having the bodies handled without any service.

I will be glad to answer any question.

Senator HARRIS. I can not understand why you need eight officers at Camp Benning.

Chaplain AXTON. We have five at Fort Benning, and the strength of that garrison is about 6,300.

Senator HARRIS. Why would you need eight at any place while there are some smaller posts that have none at all?

Chaplain AXTON. When there are eight assigned to large camps, it happens quite frequently that one or two are away sick, on leave, or at the Chaplain's School. They are organized, one with each regiment in those camps and one for hospital duty.

Senator HARRIS. Camp Dix and Camp Lewis are to be broken up. The personnel that is now there is to be scattered to some of the posts?

Chaplain AXTON. Yes, sir.

Senator HARRIS. What effect will that have on the distribution of chaplains?

Chaplain AXTON. The redistribution of the personnel that General Pershing proposes we think will fill up to the limit the smaller posts, and it may not require so many chaplains, hence his recommendation that there be a reduction of 21.

At all general hospitals it is necessary to have two chaplains, one of Protestant and one of Roman Catholic faith. Walter Reed Hospital has about 1,000 patients now and about 1,000 corps men. The basis of 1 chaplain to 1,200 officers and enlisted men was merely an experiment and had never been tested out either in war or peace, because in war we never exceeded 2,300 chaplains, with over 4,000,000 men under arms. In peace times 1 to 800 would be more nearly the proportion required for adequate service.

Senator LENROOT. How many did we have before the war?

Chaplain AXTON. Very nearly that proportion.

Senator LENROOT. How many did we have before the war?

Chaplain AXTON. We had one for each organization.

Senator WADSWORTH. Each regiment?

Chaplain AXTON. One for each regiment and 12 for coast artillery.

Senator LENROOT. What was the total number?

Chaplain AXTON. It was 74 immediately before the war. You remember the expansion of the Army began just before the war.

Senator WADSWORTH. 1916?

Chaplain AXTON. Yes; and just then it jumped up considerably. Units were kept more closely together than now, and a good many organizations that exist now as separate units we did not have in that day, air service for instance.

There is one thing that worries us a great deal. We would have 76 men turned out over night, apparently, under the scheme for reducing, as I read the act.

Senator WADSWORTH. Most of them would be discharged with a year's pay.

Chaplain AXTON. Yes; but the provision is made that it shall be done, that it must be done, by July 1, according to that act. You can not hope to pass the act before the middle of June, perhaps, and it means putting them out almost overnight. I know of no man anywhere who is sufficient of an oracle to take Army chaplains or any other corps in the Army and after picking out a few men at the top of the list who are manifestly superior and a few at the bottom who are less efficient, draw the line among the great average group and say "This man shall go out and this man shall stay in."

There are a few at the bottom who are less effective than other men mentally, temperamentally, and physically, and we might get the 21 General Pershing recommends without much heartache, because it could be done with fairness, but after you have passed that number and have to get 55 more men, and you go up in the list and find they have rendered excellent service, I do not know anyone who could make the elimination without being subject to the criticism of having shown favoritism.

Senator LENROOT. Are not chaplains promoted?

Chaplain AXTON. Yes; after a certain number of years' service.

Senator LENROOT. Then, there would not be so much discretion; you would go from the bottom of the list.

Chaplain AXTON. Yes; but you would lose your fine potentialities, these young men who have just come in and who have shown such splendid possibilities and capabilities. They will be the ones to go out if you drop them from the bottom of the list.

Senator LENROOT. But those are the men upon whom it would be the least hardship.

Chaplain AXTON. Yes. We have tried faithfully to maintain a denominational balance. That is, I mean the various churches have been represented and we have tried to keep a percentage of Roman Catholics which has been arrived at by a careful study in the War Department, and a percentage of all other denominations, and to maintain those percentages according to the needs of the Army and the religious census of the Nation, and that balance would probably be destroyed if you just cut off from the bottom the men that would have to be eliminated, and I should think you would then disturb the efficiency, too. We would not get the least efficient men out unless we took the least efficient men first and then took the remainder from the bottom of the list. However, I hope we will not have to face that proposition. We are losing about 4 per cent per annum naturally and that shows you how fast they go out under normal absorption. To get down to the quota of 136 approved for an army of 150,000 would take about three and a half years if eliminated by natural processes.

Senator LENROOT. How many grades are there?

Senator WADSWORTH. Up to lieutenant colonel.

Chaplain AXTON. Only one is colonel.

Senator LENROOT. From first lieutenant to colonel?

Chaplain AXTON. From first lieutenant, and after 5 years captain, 14 years major, and 20 years lieutenant colonel.

Senator WADSWORTH. Your rank as a colonel goes with your office?

Chaplain AXTON. So long as I hold the office.

Senator WADSWORTH. The office of Chief of Chaplains.

Chaplain AXTON. Chief of Chaplains with the rank of colonel as long as I remain Chief of Chaplains.

Senator WADSWORTH. Your permanent rank is lieutenant colonel?

Chaplain AXTON. It happens to be major. A veterinarian may become a colonel and a dentist may become a colonel, but a chaplain may reach lieutenant colonel and does not go beyond that. There are dentists in the Army who were first lieutenants when I was a major and they are now colonels, and I think it ought to be corrected some day. I have not agitated for it very hard because I felt so grateful

for what was done a year and a half ago when you gave us the organization we now have.

Senator WADSWORTH. You now have a real service.

Chaplain AXTON. We think so. We have it supervised. We have always gone on this theory, that unsupervised operatives are not effective, and the chaplains were wholly unsupervised. Now they are supervised and the men of all denominations have yielded to it most gracefully and have worked under it. We think it very successful.

Senator HARRIS. Colonel, while you are here I would like to say I came back on a transport from the Orient and the chaplain gave most of his time to entertaining officers and ladies and the enlisted men were all complaining. It talked with them about it, and that was one of the things on which they were all agreed, that the chaplains did not give the attention they should to the enlisted men but spent their time entertaining the officers and ladies.

Chaplain AXTON. Well, some chaplains have that misconception of their office. I am sorry to say.

Senator HARRIS. I know that was true, because I watched and saw how much time they gave to the officers and ladies.

Chaplain AXTON. That is true of some, but most of our chaplains have struck a fine balance, and while not forgetting the officers they give a great deal of time to the privates. I am interested in that. You might give the name of the chaplain.

Senator HARRIS. I am not making any complaint.

Chaplain AXTON. But it might be good for him and good for the service. Unfortunately there are some men who narrow down to their own denomination, forgetting that all men have to be served, and we have to make them forget that and teach them that they must minister to the whole command. If they have not the genius to do it alone or the resources to do it alone they must get help from some outside sources.

And another thing, the churches are behind the chaplains and are rendering to the chaplains all the aid and encouragement possible, such as they never did before. There are agencies in nearly all the churches organized with that thing in view, to see that the chaplains have their hands strengthened and to help them carry on a religious program.

Senator LENROOT. Do you find any difficulty in Catholics serving Protestants and Protestants serving Catholics?

Chaplain AXTON. They can not serve them except as they get assistance. Of course, a Catholic chaplain holds his masses—

Senator LENROOT. I know that, but there are many things a Catholic can do in the way of encouragement.

Chaplain AXTON. Yes; and we seldom find denominational lines preventing a chaplain from helping a boy over a rough place; they do it. One fine thing that has grown up is a school for chaplains. It takes a few men to care for it; but it strengthens the chaplains who are students and gives them the benefit of contact with each other. It is easy to get a Catholic to play ball with a Baptist when they have attended the school for a short time. This reminds me of something Father Francis P. Duffy said recently. We were together in New York at a conference and were talking about chaplains and welfare and religious work in the Army, and Doctor Duffy said: "I

wish we could all go down to Atlantic City and take off these crosses and Roman collars and put on bathing suits and get out in the sand. It would be a fine thing for all of us." And he did not have to make any application of that to those of us who are in what might be called nonsectarian work.

I would like now to introduce Doctor Watson, and to say that he represents the Federal Council of Churches, which is an agency speaking for 30 of the big protestant denominations in this country. They recently had a meeting at which they took action, and I think he could in a minute or two give us light on the attitude of the churches.

Senator WADSWORTH. We would be very glad to hear him.

STATEMENT OF DR. E. O. WATSON.

Doctor WATSON. Gentlemen of the committee, it seems to me Colonel Axton has covered in a very practical and concise way every point that is involved, and it places me in the position like the man who had the veterinary come to prescribe for his mule, and he told him to give him a dose of medicine through a quill. The next day he came and asked him how his mule was. He said, "He is all right; but I am nearly dead." He said, "Why, didn't you do as I told you?" "Yes; but the mule got the first blow."

Chief Chaplain Axton has had the first blow, but I do want to say that the general committee on Army and Navy chaplains of the Federal Council of Churches of Christ in America has through all its years of existence, now seven or eight years, been vitally interested in the question of religious work in the Army and Navy and the spiritual atmosphere in the Army, and is striving to promote in every possible way just such conditions as would minister in the most effective way for the making of an Army that would have such character as would make it stand out as the very best specimen morally, whether as a fighting machine, police machine, or what, that the sun shines on. We feel we have accomplished a great deal and that we are indebted to the Senate committee and other committees for a great deal that has been achieved in bringing about the office that Chaplain Axton now supervises and the conditions that we now have, and we are very much exercised with reference to the present situation and the pending legislation as it affects the particular question of the religious welfare of the Army.

I may take your time, if you will permit me, as I have just had it brought strikingly to my attention in the last few days in preparing my report, to refer to Bishop W. R. Lambuth's report as to the Army in Europe during the war. He was a man of wide vision, a man who always gave his attention to the needy spots of the earth, and while over there he gave a great deal of his time and attention to the Negroes in the Army and to the Chinese laborers and was able to preach to the Chinese in their own language. He came back and made a report to our committee three years ago, and I read the shorthand account of it just yesterday. In it he said something like this, answering the question the Senator raised just a little while ago. He said, "The highest impression that has been made in matters religious, the impression of the Army in France on other countries, has been by the doughboys of our American Army. Those dough-

boys," he said, "are always talking about mother, home, and the little church that they were affiliated with if not members of, and it has made a tremendous moral impression upon the rank and file of the French and the leaders of other nations."

He went on, then, to say that the officer was the neglected one in the spiritual work of the Army, rather than the doughboy, as he observed it in France, the common need and the common expression being activity in behalf of the doughboy. That is the ideal we have, that the American Army, whether it be small or large, as the necessities may require, shall be an Army that wherever it goes shall have such moral standards and moral quality about it as shall make the sort of impression I have just indicated to you as being the effect as observed by Bishop W. R. Lambuth, now dead, having died since the time of this report.

So when we considered these pending bills and their effect on chaplains we had a meeting of our committee and there were gathered in that meeting representatives of 30 of the different religious denominations from all over the country, and with the facts before them they were unanimous in the adoption of certain resolutions, the heart of which I might lay before you now, although to some extent I may be repeating what the chaplain has said.

First of all, that committee is for an Army of only such size as is necessary, but they believe that its reduction should be wisely and sanely carried on. They are not of a wild pacifist sort, that want the Army cut down to nothing when needs may arise any day that we will want an Army of at least 150,000 men. They make no direct expression on that beyond favoring reduction of Army and Navy pursuant to the action of the Conference on Limitation of Armament, but believe it should be on the basis of careful study, and especially that due regard be had for the spiritual interests of the officers and men remaining in the Army and in the Navy.

They set forth, too, in those resolutions that in view of the 93 camps, posts, and stations in the United States in which chaplains are on duty, the 34 chaplains required for service outside the continental limits of the United States, the 18 stations in the United States at which there is urgent need for chaplains and for which none are available, and in view of chaplains in attendance, 10 per cent upon the Chaplains' School and on sick leave, and in view of the fact that all chaplains are by law entitled to be on leave for one month, dividing the service by one-twelfth, and that there are 16 camps, posts, or stations in the United States, including three general hospitals, at which it is desirable that there should be two or more chaplains on duty, and in view, further, of the fact that four chaplains are on duty in the cemeteries of France and five are required as instructors at the training school, and, further, in view of the insistent demand of those who send their sons to citizens' training camps that suitable provision be made for safeguarding the spiritual life of these young men (and our organization receives constantly letters from church bodies and letters from homes asking what provision is going to be made for the religious service of our sons who go to these civilian training camps); in view of all that, and in view of requiring one chaplain of the Protestant faith and one of the Roman Catholic faith in each of these military training camps, it is clear that such a re-

duction of the chaplains as contemplated in H. R. 10871 would be disastrous to the spiritual interests of the men in the service and would be unfair and unjust to the chaplains.

And they further say that this committee is convinced that with an Army of 135,000 enlisted men or less a ratio of 1 chaplain for every 1,200 officers and enlisted men does not provide adequately for the religious needs of the Army, and it appears to us that the two years under such ratio has demonstrated that while a ratio of 1 chaplain for every 1,200 officers and enlisted men might be sufficient for an Army mobilized in a few large units, that such ratio is not at all sufficient for a small Army in scattered units, and that the needs of such small Army in such scattered units would be more nearly that of a ratio of 1 chaplain to every 800 enlisted men and officers. As between the two bills, H. R. 10871 and H. R. 10271, the last known as the Pershing bill, one of which has already passed the House and the other is before it, we approve H. R. 10271, which, while reducing the number of officers to 13,000 and fixing 136 as the ultimate number of chaplains, provides that in this reduction 21 shall be separated from the service within the period of five months upon the recommendation of a board of 5 officers, acting under regulations prescribed by the Secretary of War, leaving 158 in service after five months, and the additional 22 necessary to be separated in accord with the bill to bring the number to 136 to be gradually absorbed by retirement, discharge, and other normal means.

We are in touch with 4,000 individuals from whom we have recently heard on this question, and not from a single one of those individuals have we gotten any reaction other than that there should be in no event the drastic reduction of chaplains contemplated by H. R. 10871, or bringing them down to 103, which means separating practically overnight two-fifths of the whole body of chaplains from the service. We think that the greatest reduction that should be made is that contemplated in what is known as the Pershing bill, which would provide for 136 chaplains finally, 21 of them to be eliminated within five months and 22 thereafter to be absorbed by normal or natural processes, and we sincerely hope that the last will be the action that will finally be agreed upon in the particular emergency as meeting the situation to-day.

Above all, we simply want religious efficiency in the Army because of what it will do for the Army, that our United States may have an Army that, no matter where it goes nor what it needs, will represent in a Christian way a Christian Nation; that there shall be a morale all the way through it that can not be had except by an adequate ministry along spiritual lines, and the least number that can bring that about effectively is the 136 chaplains.

In closing may I leave these resolutions with you :

RESOLUTION CONCERNING CHAPLAIN LEGISLATION.

[Adopted by the general committee on Army and Navy chaplains of the Federal Council of the Churches of Christ in America, April 6, 1922.]

Resolved, That while this committee heartily favors the reduction of armament and the carrying on to consummation of all the treaties and resolutions resulting from the conference on limitation of armament held in Washington, and while in accord with these treaties we approve reduction in Army and Navy pursuant to the actions of the conference on limitation of armament, yet

we believe that such reductions should be on a basis resulting from careful study of all questions involved and especially that due regard should be had for the spiritual interests of the men and officers remaining in the Army and in the Navy.

Resolved, That we can not approve H. R. 10871, already passed by the House of Representatives, which reduces the strength of the Army to 115,000 enlisted men and 11,000 officers and providing one chaplain, as now authorized, for every 1,200 officers and enlisted men of the Regular Army, which would reduce the chaplains to 105, separating 74 of these chaplains, two-fifths of the entire number, from the service by July 1, possibly practically without notice.

Resolved, That in view of the 93 camps, posts, and stations of the United States at which chaplains are on duty, the 34 chaplains required for service outside the continental limits of the United States, the 18 stations in the United States at which there is urgent need for chaplains and for which none are available; and in view of chaplains in attendance 10 per cent upon the Chaplains' School and on sick leave, and in view of the fact that all chaplains are by law entitled to be on leave for one month, dividing the service by one-twelfth and that there are 16 camps, posts, or stations in the United States, including three general hospitals, at which it is desirable that there should be two or more chaplains on duty, and in view further of the fact that four chaplains are on duty in the cemeteries of France and five are required as instructors at the training school, and further, in view of the insistent demand from those who send their sons to citizens' military training camps that suitable provision be made for safeguarding the spiritual life of these young men, requiring one chaplain of the Protestant faith and one of the Roman Catholic faith in each of these military training camps, it is clear that such a reduction of the chaplains as contemplated in H. R. 10871 would be disastrous to the spiritual interests of the men in the service and would be unfair and unjust to the chaplains.

Resolved, That this committee is convinced that with an army of 135,000 enlisted men or less a ratio of one chaplain for every 1,200 officers and enlisted men does not provide adequately for the religious needs of the Army, and it appears to us that the two years under such ratio has demonstrated that while a ratio of one chaplain for every 1,200 officers and enlisted men might be sufficient for an army mobilized in a few large units, that such ratio is not at all sufficient for the needs of a small army in scattered units and that the needs of such small army in such scattered units will be more nearly met in a ratio of one chaplain to every 800 enlisted men and officers, and we express the earnest desire that such legislation may be enacted as will adequately provide for the spiritual interests of all the Army in this or such ratio as may be demonstrated by needs in the future.

Resolved, That as between the two bills, H. R. 10871 and H. R. 10271, now before the House, we approve H. R. 10271, which, while reducing the number of officers to 13,000 and fixing 136 as the ultimate number of chaplains, provides that in this reduction 21 shall be separated from the service within the period of five months upon the recommendation of a board of five officers acting under regulations prescribed by the Secretary of War, leaving 153 in service after five months, and the additional 22 necessary to be separated in accord with the bill to bring the number to 136 to be gradually absorbed by retirement, discharge, and other normal means.

Chaplain Axton. I would like to say that Father Lewis J. O'Hern represents Archbishop Hayes who, by the Holy See, has been designated to care for the spiritual affairs of the Catholic Army and Navy chaplains.

STATEMENT OF REV. LEWIS J. O'HERN, C. S. P.

Doctor O'HERN. I would like to approve everything that has been so very well said by the two who have preceded me and to say from our point of view at least, it would be a calamity to reduce chaplains beneath the present number, provided that the same number of military posts are retained throughout the country.

I take it for granted that there will be no substantial reduction in the number of military posts, and therefore I say that our present

supply of Catholic chaplains is very inadequate. It has been my duty to provide Catholic priests during the past year for the following stations in and about Washington where no provision is made for Catholic chaplains. Each Sunday I have sent a priest to the United States Public Health Service hospital on Wisconsin Avenue; I have also provided a civilian Catholic chaplain each Sunday for the Washington Barracks; I have provided one faithfully for Camp Humphreys, a place that is practically inaccessible—almost so, at least, and therefore, unless we send a chaplain to the post there are no Catholic services that could be provided for the officers and men of the post; and also we have sent a priest whenever we could find one available to Fort Washington, another place that is practically inaccessible. In addition to this, for three months I sent a chaplain regularly to the Walter Reed Hospital because the chaplain on duty there was detailed to the Chaplains' School. One was also provided for Camp Eustis while the Catholic chaplain was at school.

So you see that just in this small area, which falls under my immediate supervision, we have such a shortage of Catholic chaplains to care for the spiritual and religious needs of the men that it could hardly stand a reduction. And I know that the situation is somewhat similar throughout the whole country. I presume that this is simply a normal condition existing in and about Washington, and were it not for the fact that Father Campbell is on duty as aide to Colonel Axton, we would be obliged to send a civilian chaplain also to Fort Myer. Therefore, I believe it would be a calamity if the number were to be reduced, owing to the fact that we are even now very severely and very sorely handicapped. And I am sure the parents of these boys expected when they entered the service they would have religious exercises provided for them by their own church, whether it be Catholic or Protestant or Jewish.

Such being the case, gentlemen, we trust you will see your way somehow to keep the present number of chaplains in the Army, and thus keep up the high standard that our boys displayed in France. We want to keep in the Army the spirit that made them so remarkable in the great World War.

Senator WADSWORTH. I have not been inattentive while you have been testifying; but at the same time I was endeavoring to find out whether anything was said before the House committee, and I can not find anything.

Chaplain AXTON. I think not, sir. We had no hearing there at all.

That is all we have at present, but I would be very glad to answer any questions that you may desire to ask.

Senator WADSWORTH. I think we have a pretty good idea of it.

Chaplain AXTON. I only came because I wanted you to have an earnest of our sincere desire to have the number of chaplains kept up, and not because we thought you were not well informed.

Senator HARRIS. You said you had a relative number of each denomination.

Chaplain AXTON. We aim to do it.

Senator HARRIS. Just how many chaplains of the leading denominations are there to-day?

Chaplain AXTON. There are 39 Roman Catholic priests, sir; of Baptists, for instance, one of the largest denominations, with many subdivisions, there are 26; of Methodists there are to-day 42.

That disparity between the Roman Catholics and the Methodists does not mean that there are more Methodists than Roman Catholics in the Army; but when the appointments were made under the reorganization of 1920 the Roman Catholic Church did not send enough candidates to fill up their quota, which was fixed at 60, and then we had to stop appointing when the reduction was made, so they never have had quite their full quota of chaplains, but through no fault in the effort to get denominational apportionment properly adjusted.

Senator HARRIS. How many Presbyterians are there, that happen-
ing to be my denomination.

Chaplain AXTON. There are 15 Presbyterians. You can not always hold the balance exactly, because in the Army, as elsewhere, men change their affiliations. We have just recently had one chaplain change from Baptist to Presbyterian. We have 15 Presbyterians.

Senator WADSWORTH. All right, General Lord.

STATEMENT OF BRIG. GEN. H. M. LORD, ACCOMPANIED BY MAJ. JAMES MacKAY.

PAY OF THE ARMY.

General LORD. Mr. Chairman, in taking up the pay of the Army I will ask, with your consent, Major MacKay, who is very familiar with all its details, to take up the various items, if you wish to discuss it in that way.

Senator WADSWORTH. General Lord and Major MacKay, the committee is disposed, of course, to let you proceed in your own way, but I hope that you will state at the beginning upon what theory these different estimates are made. We have three possible pay schedules upon which these appropriations must be based; we have the 1908 permanent pay schedule and the May, 1920, or temporary schedules now in force, and the pay schedules that may come into force as the result of pending legislation.

General LORD. The bill carries the pay schedule of 1908.

Senator WADSWORTH. And subsequent permanent acts.

General LORD. And subsequent permanent acts; yes.

Senator WADSWORTH. For example, the enlisted men of the Army received a permanent increase in 1917; the officers did not.

General LORD. Yes.

Senator WADSWORTH. The noncommissioned officers in the Army got a temporary increase in 1920.

General LORD. Yes.

Senator WADSWORTH. Which will expire on June 30?

General LORD. Yes.

Major MacKAY. I might say, Senator, that the estimates are based on an average enlisted strength of 150,000 men in the permanent establishment and 7,882 Philippine Scouts.

Senator LENROOT. Can that number be increased at will?

THE PHILIPPINE SCOUTS.

Major MacKAY. The Philippine Scouts can be increased by the President to 12,000.

Senator LENROOT. I mean is there any difficulty about increasing it as far as enlistment is concerned?

Major MacKAY. I do not think so.

Senator WADSWORTH. If you wanted more, you could get them?

Major MacKAY. I think so. The estimates are based on pay for officers under the act of May 11, 1908, plus the temporary increase authorized by the act of May 18, 1920, and the same thing is true of the enlisted men.

Senator WADSWORTH. You are now speaking of the Budget estimate?

Major MacKAY. No; I am now speaking of the revised estimates.

Senator LENROOT. By the Budget?

Major MacKAY. It is the revised estimate by the War Department, which is below the Budget. The estimate as revised calls for \$149,732,279.

Senator WADSWORTH. I think this table had better go into the record.

Estimates for "Pay of the Army, 1923."

	Appropriation, 1922.	Estimate submitted for fiscal year 1923.			Reported by House Appropriations Committee, and passed by House.	Revised estimate.
		Base pay and allowances.	Temporary increase, act May 18, 1920.	Total.		
1. Pay of officers.....	\$46,000,000	\$33,924,700	\$9,032,820	\$42,957,520	\$26,896,200	\$42,311,860
2. Officers, National Guard.....	100	100	100	100	100	100
3. Officers' Reserve Corps.....	250,000	3,088,852	841,050	3,927,902	250,000	2,904,000
4. Warrant officers.....	1,413,000	1,618,240	24,000	1,642,240	1,534,336	1,601,280
5. Aviation increase, officers.....	1,000,000	1,000,000	.....	1,000,000	846,000	1,000,000
6. Longevity increase, officers.....	4,000,000	6,590,110	.....	6,590,110	4,000,000	6,047,821
7. Pay of enlisted men.....	77,741,370	64,307,389	3,623,705	67,931,094	48,863,088	67,931,094
8. Enlisted men, National Guard.....	100	100	.....	100	100	100
9. Enlisted Reserve Corps.....	100	431,220	86,245	517,465	100	258,000
10. Aviation increase, enlisted men.....	150,000	250,000	.....	250,000	150,000	250,000
11. Philippine Scouts.....	1,046,000	1,249,272	.....	1,249,272	1,046,000	1,249,272
12. Longevity increase, enlisted men.....	4,600,000	4,736,460	.....	4,736,460	4,500,000	4,736,460
13. Retired officers.....	5,000,000	6,000,000	.....	6,000,000	5,000,000	6,000,000
14. Active duty, retired officers.....	275,000	207,560	157,560	365,120	207,560	79,702
15. Retired enlisted men.....	4,180,167	5,000,000	.....	5,000,000	4,500,000	5,000,000
16. Active duty, retired enlisted men.....	17,817	2,904	13,992	16,896	2,904	16,896
17. Philippine Scout officers.....	185,640	.....	.....	.....	.....	.....
18. Retired pay clerks.....	18,562	16,875	.....	16,875	13,500	13,500
19. Retired veterinarians.....	3,570	3,570	.....	3,570	3,570	3,570
20. Clerks, office Chief of Staff.....	147,590	137,470	.....	137,470	(1)	(1)
21. Clerks, Army War College.....	48,100	58,220	.....	58,220	(2)	(2)
22. Army field clerks.....	733,000	594,400	88,800	683,200	382,400	681,880
23. Foreign service, Army field clerks.....	5,000	5,047	.....	5,047	3,000	3,388
24. Commutation of quarters, heat and light, Army field clerks.....	198,000	155,338	.....	155,338	97,000	155,338
25. Commutation of quarters, heat and light, field clerks, Quartermaster Corps.....	75,000	75,021	.....	75,021	75,021	75,021
26. Contract surgeons.....	56,801	41,100	.....	41,100	41,100	41,100
27. Nurses.....	800,000	636,600	109,920	746,520	509,280	746,520
28. Hospital matrons.....	3,000	3,000	.....	3,000	3,000	3,000
29. Courts-martial.....	87,500	88,413	.....	88,413	70,000	88,413
30. Commutation of quarters, heat and light.....	5,000,000	6,437,560	.....	6,437,560	4,250,000	5,582,508
31. Interest on deposits.....	100,000	100,000	.....	100,000	100,000	100,000
32. Expert accountant, Inspector General's Department.....	2,500	2,500	.....	2,500	2,500	2,500
33. Foreign service increase, officers.....	325,000	409,969	.....	409,969	200,000	210,533
34. Foreign service increase, enlisted men.....	1,750,000	1,767,240	.....	1,767,240	700,000	812,223

¹ Transferred to "Salaries, Office Chief of Staff."

² Transferred to "Army War College."

Estimates for "Pay of the Army, 1923"—Continued.

	Appropriation, 1922.	Estimate submitted for fiscal year 1923.			Reported by House Appropriations Committee, and passed by House.	Revised estimate.
		Base pay and allowances.	Temporary increase, act May 18, 1920.	Total.		
35. Computer, Artillery Board.....	\$2,500					
36. Payment of discharge.....	5,000	\$5,000		\$5,000	\$5,000	\$5,000
37. Pay for mounts.....	200,000	75,000		75,000	50,000	50,000
38. Jennie Carroll.....	1,500	1,500		1,500	1,500	1,500
39. Mabel H. Lazear.....	1,500	1,500		1,500	1,500	1,500
40. John R. Kissinger.....	1,200	1,200		1,200	1,200	1,200
41. Clerks, Finance Department.....	1,420,000	1,267,000		1,267,000	1,000,000	1,767,000
Total.....	156,844,617	140,288,420	\$13,978,092	154,266,512	105,335,959	148,732,279
42. Mileage.....	1,875,000	2,000,000		2,000,000	1,100,000	2,500,000

Major **MACKEY**. The pay of officers is based upon reductions proposed by the so-called Pershing bill. That gives a weighted average throughout the year of 12,531 officers, distributed in the grades shown on the chart which I have just given you.

Senator **LENROOT**. Twelve thousand five hundred and thirty-one!

Major **MACKEY**. Twelve thousand five hundred and thirty-one. That provides for 1 general, 36 major generals, 58 brigadier generals, 544 colonels, 695 lieutenant colonels, 2,617 majors, 4,863 captains, 3,189 first lieutenants, and 528 second lieutenants.

Senator **WADSWORTH**. That is counting all branches?

Major **MACKEY**. That is all officers of the line and staff, the total amount required being \$42,311,860.

Those numbers were arrived at on the assumption that the proposed bill for the reduction of the Army would go into effect as of June 1 of this year. That would permit those officers who are eliminated from the service during the month of June with one year's pay, to be paid out of this year's appropriation, so that the money required for the remaining discharges will come out of 1923 appropriation.

Senator **LENROOT**. Is this figure of \$26,000,000 in the House bill correct and, if not, what would be a correct figure?

Major **MACKEY**. I do not understand your question, Senator.

Senator **LENROOT**. The House appropriates \$26,000,000 for pay of officers, line and staff, with the legislation there contained. Is that the correct appropriation for their plans?

Major **MACKEY**. Approximately, I think.

Senator **LENROOT**. I think some one told us that that did not include the pay for the retired officers with one year's pay provided for, but that would only pay the 11,000 officers in the line.

Major **MACKEY**. That probably is true. I have not analyzed the House figures. But probably that is true.

Senator **LENROOT**. I think that we ought to know, not on the theory that we are going to adopt it, but I think we ought to know what the correct figure will be.

General **LORD**. Would you like us to analyze that?

Senator **LENROOT**. Yes.

NOTE.—Following is a statement showing the commissioned officers for which the amount of \$26,896,200 passed by the House will provide pay:

	Number.	Rate.	Total.
General.....	1	\$13,500	\$13,500
Major general.....	35	8,000	280,000
Brigadier general.....	38	6,000	228,000
Colonel.....	406	4,000	1,624,000
Lieutenant colonel.....	326	3,500	1,141,000
Major.....	1,854	3,000	5,562,000
Captain.....	3,400	2,400	8,160,000
First lieutenant.....	2,948	2,000	5,896,000
Second lieutenant.....	1,786	1,700	3,036,200
Total.....	11,023		26,782,300
Additional pay of aids:			
For major general.....	26	200	5,200
For brigadier general.....	58	150	8,700
Gratuity of 6 months' pay.....			100,000
Grand total.....			26,896,200

NOTE.—It appears that the House subcommittee which considered the Army bill had at one time under consideration providing funds for 28 major generals and 42 brigadier generals, but later increased the numbers to 35 major generals and 58 brigadier generals, the numbers authorized under the act of June 4, 1920, thus increasing the total number of officers to 11,023. No provision is made for the pay of discharged officers.

Senator WADSWORTH. I will call attention to the fact that professors of the United States Military Academy are included in that money here although they are also included in the military pay items under the academy section of the bill.

Major MACKAY. It is also doubtful whether the House bill provides pay for the Philippine Scouts' officers and the emergency officers undergoing treatment who have not yet been discharged.

Senator WADSWORTH. Proceed.

OFFICERS OF THE RESERVE CORPS.

Major MACKAY. The next item is pay of officers of the Officers' Reserve Corps.

General LORD. The National Guard.

Major MACKAY. The amount for National Guard is unchanged. The amount passed by the House for the officers of the Officers' Reserve Corps is \$250,000. The amount of the revised estimate which provides for the training of 20,000 officers for 15 days, is \$2,904,000.

Senator WADSWORTH. That was a revision of the estimate made by the Budget?

Major MACKAY. Yes, sir; the estimate as originally submitted was for \$3,927,902.

Senator LENROOT. Was that on the basis of 30,000?

Major MACKAY. That was on the basis of 15 days' training for 30,150 reserve officers.

Senator WADSWORTH. Was the estimate revised to such an extent as to cut off \$1,000,000?

Major MACKAY. Yes; in estimating for 20,000 instead of 30,150, the original number.

I think General Lassiter went into the question of the number of reserve officers to be called to active duty.

Senator WADSWORTH. Yes.

WARRANT OFFICERS.

Major MACKEY. The next item is for the pay of warrant officers. The amount of the estimate as originally submitted was \$1,642,240, which was reduced by the House to \$1,534,336, the revised estimate being \$1,601,280.

That amount will provide for 1,120 warrant officers other than the mine-planter service, and 75 warrant officers for the mine-planter service.

Senator WADSWORTH. The amount appropriated by the House?

Major MACKEY. No; the revised estimate provides for those numbers.

Senator WADSWORTH. The revised estimate is only \$70,000 higher than the House appropriation, roughly speaking. The House appropriation is \$1,534,000 and the estimate is now \$1,601,000, \$67,000 more. But now the question that I was about to ask is this: If both the provisos were adopted and passed into legislation, it seems to me they would accomplish more than a reduction of \$70,000 in the requirements for pay of warrant officers in the two services, mine planter and line. I may be wrong, but that is the impression I get. You see you instantly discharge, under the first proviso, without any retirement, 38 warrant officers from the mine-planter service and to instantly begin to retire or to accept the resignations of the ordinary warrant officers without filling any vacancies, and those ordinary warrant officers have the privilege of retirement under the pay of second lieutenant, I believe.

Major MACKEY. \$1,320 a year is the pay of warrant officers.

Senator WADSWORTH. And they get three-fourths of that when they retire?

Major MACKEY. Yes.

Senator LENROOT. That retired pay does not come out of this, does it?

Major MACKEY. No.

Senator WADSWORTH. It does not, that is true.

Major MACKEY. This item includes only warrant officers on the active list.

Senator WADSWORTH. I do not question the accuracy of your figures in the slightest, but I was wondering how the House reached its figure of \$1,574,000 in view of the two provisos they added to the item?

Major MACKEY. I will analyze those figures and show you just what the House figures will provide for.

NOTE.—The following statement shows the number of warrant officers for which the amount of \$1,534,336, passed by the House, will provide pay:

	Number.	Annual pay.	Total.
Army mine-planter service:			
Masters.....	8	\$1,800	\$14,400
First mates.....	8	1,320	10,560
Second mates.....	8	972	7,776
Chief engineers.....	8	1,700	13,600
Assistant engineers.....	8	1,200	9,600
Total.....	40		55,936
Other warrant officers.....	1,120	1,320	1,478,400
Grand total.....	1,160		1,534,336

Senator WADSWORTH. Thirty-eight warrant officers of the mine-planter service are to be discharged immediately?

Major MACKEY. Yes.

Senator WADSWORTH. With no one year's pay and no retirement, and their average pay is \$2,000; and there would be right there \$76,000 saved.

Major MACKEY. The next amount is for the aviation increase to officers.

Senator LENROOT. Before you leave that other item, I would like to ask just one question. Has your number increased? I thought you had the full complement last year.

Major MACKEY. The full number authorized——

Senator LENROOT (interposing). Anyway, you are not increasing the number?

Major MACKEY. No; the numbers are decreased from the Budget estimate.

Senator LENROOT. I am speaking of this year. You had \$1,413,000 for the pay of warrant officers this year. Now there is an increase of \$200,000 in the Budget estimate and an increase of \$100,000 in your own estimate. Do you estimate that your warrant officers will increase in number during the next year?

Major MACKEY. Well, as a matter of fact, that \$1,413,000 is not sufficient to provide pay for warrant officers during 1922.

Senator WADSWORTH. Perhaps I can contribute a little out of my recollection. When we wrote down the appropriation for the current year there were in the Army, as I recollect it, about 1,002 warrant officers. The grade had not been filled, and the committee figured out that it would take the entire fiscal year, or nearly all of it, to fill up to the 1,120 authorized, so we compromised, it might be said, at \$1,413,000, which would probably pay all that you would get in for the year. But now they have filled the grade within a very few of the authorized maximum.

Major MACKEY. The records of the Chief of Finance show that up to December 31, 1921, there was paid to warrant officers \$737,679.15, which is considerably more than half of \$1,413,000 and which, of course, clearly indicate that \$1,413,000 will not be sufficient to pay warrant officers for the current fiscal year.

Senator LENROOT. What is your total authorized strength of warrant officers?

Major MACKEY. One thousand one hundred and twenty warrant officers and 5 warrant officers for each mine planter in the mine-planter service.

Senator LENROOT. I think they have 78 now.

Major MACKEY. Seventy-eight, I believe, in the mine-planter service.

Senator LENROOT. How many warrant officers have you in all?

Major MACKEY. There are now 78 warrant officers in the mine-planter service, and the last report I have, which is dated March 31, 1922, shows 1,110 warrant officers other than in the mine-planter service, making a total of 1,188 warrant officers.

Senator LENROOT. I notice in your testimony before the House you said there were 1,203 in service on December 31, which would seem to exceed the number authorized.

Major MACKEY. No; I do not believe that the numbers authorized have been exceeded. There are two classes of warrant officers.

Senator LENROOT. Yes; and the mine-planter service?

Major MACKEY. And the mine-planter service.

Senator LENROOT. That does not make that many.

Major MACKEY. One thousand two hundred and three, did you say?

Senator LENROOT. One thousand two hundred and three.

Major MACKEY. That would make 1,120 of the one class and 83 of the mine-planter service.

Senator LENROOT. So you had a full complement on December 31 last?

Major MACKEY. Yes, sir; that is true.

Senator WADSWORTH. When you were testifying before the House were you not speaking of the authorized strength of the regular warrant officers and the actual strength at that time of the Army mine-planter service, the two together making 1,203?

Major MACKEY. I think not, Senator. I think at that time they had the full number authorized. The full number had been appointed, I believe.

Senator LENROOT. You said "full number 1,120, exclusive of those in the mine-planter service; that was the number we had on December 31." Of course, that 1,120 authorized was on the basis of an Army of 280,000 men. Does not the size of the Army have anything to do with this question?

Major MACKEY. Well, that question, I think, was covered by General Lassiter and The Adjutant General. I am not prepared to discuss the organization of the Army. I am not qualified to say.

Senator LENROOT. I was not speaking of any future changes, but because of the reduction in the number of men I understand there has been an actual reduction of the number of units to some extent in the organization from that authorized?

Major MACKEY. Yes.

Senator LENROOT. And to whatever extent it is, would it not affect the number of warrant officers necessary?

Major MACKEY. Well, it would seem so.

Senator WADSWORTH. I think, General Lord, there can be no doubt about that. Senator Lenroot has mentioned some reduction in the number of units. As a matter of fact, it has been a very substantial reduction. We have relieved very many regiments, and I assume that the warrant officers must bear some relation to the number of units. Of course, there are warrant officers on duty regardless of the number of units, but the number of units must reduce the requirement for a considerable number of warrant officers.

General LORD. The great majority of them are employed on duty disassociated from units. We have 42 in the Finance Department which are in the field handling finance matters, some on contract audits and property audits. They are being used on important work, and they are not necessarily associated with any organizational units.

Senator WADSWORTH. No; those men are not; but there are some who are. I can see very well that you can not reduce the number of warrant officers in the same ratio as you reduce the rest of the Army. but a reduction of 80,000 in the Army which occurred last year ac-

accompanied by a reduction of a large number of battalions and regiments should necessarily bring about some reduction in the number of warrant officers.

General LORD. I do not think that can be gainsaid. Major Benedict here, who is very familiar with that matter, calls attention to the fact that our band leaders, of course, are included under those warrant officers.

What proportion outside of these assigned to the staff and the band leaders do you think are with military organizations?

Major BENEDICT. None, except the band leaders.

Senator WADSWORTH. None at regimental headquarters?

Major BENEDICT. They are all on detached duty; they are not with organizational units, except the band leaders.

Senator LENROOT. What do the warrant officers do?

General LORD. I can speak of those in the Finance Department. We have in Washington two in connection with our property audit; out in the field they are working in connection with pay rolls, pay vouchers, settlement of accounts; but most of them in the Finance Department are working on property audits in the field. They are used in the other staff departments along similar lines, as far as I know, in connection with field service, the handling of supplies, requisitions of and issuing of supplies and invoices, and activities of that sort.

Senator LENROOT. General, does not the size of the Army affect the work, no matter where they are located? There are less supplies to handle, there are a fewer number of audits to make of disbursements, and no matter where the men are employed it seems to me a very substantial reduction in the size of the Army ought to affect the number of warrant officers.

General LORD. I think this, that it does eventually reflect itself in the number of men that are needed, but a reduction of the Army brings with it always additional duties, so that there is postponed the particular effect that would result in the reduction of such personnel as the warrant officers. All of this reduction in the enlisted personnel results in changes of stations, in changes of activities, changes of movement of supplies, and as far as our warrant officers are concerned our work has increased instead of decreased on account of handling the audit of supplies that are changing and being moved, and the same with the personnel. But eventually it would result—no question about that—in something of a reduction in the force.

Senator HARRIS. I can see, General, how they would not reduce relatively as you reduced the number of enlisted men, but to say that an Army of 150,000 needs as many field clerks as one, for instance, to use an extreme, of 1,000,000 would be an absurd statement, would it not?

General LORD. Yes; that would not hold good, but nobody contends that, I think.

Senator HARRIS. Between these two extremes there must be some mean.

Senator LENROOT. You do not think any harm would come from the last proviso, provided that no vacancy in grade of warrant officers shall be filled during the next fiscal year, do you?

BAND LEADERS.

General LORD. I think you should take into account the suggested amendment presented to the committee by Colonel Davis, that you should provide that vacancies in the position of band leaders be filled.

Senator LENROOT. That would be so, of course.

Senator HARRIS. There are 151 of those, are there not?

Senator WADSWORTH. One hundred and fifteen.

AVIATION INCREASE OF OFFICERS.

Major MacKAY. The next item is aviation increase of officers. The amount estimated was \$1,000,000. This was cut by the House to \$846,000. We ask that that \$1,000,000 be restored.

Senator WADSWORTH. I assume the House cut was made on the theory there would be fewer aviation officers on account of the reduction of the commissioned personnel to 11,000?

Major MacKAY. I assume that was it.

Senator WADSWORTH. I assumed that was it. You might state for the purpose of the record how many officers would receive the extra flying pay under the estimate of \$1,000,000 which you have just now suggested.

Major MacKAY. Practically 1,000 officers.

Senator WADSWORTH. Practically 1,000 officers you mean would receive it under the appropriation of the House?

Major MacKAY. I would say the House figures will provide for a proportionate reduction, or about 846.

Senator LENROOT. In reference to the proviso put in by the House not estimated, is the construction especially given it there the construction that is being given to it now as to flying pay, or is it not?

Major MacKAY. The basic law provides that this increase shall be payable to any officer of the Army who participates regularly and frequently in an aerial flight, while the appropriation bill heretofore provided funds only to officers of the Air Service. The comptroller, however, has given a decision to the effect that only officers of the Air Service are entitled to this aviation increase, so it is to remedy that situation this new legislation was added.

Senator LENROOT. Will this proviso entail any increased expense?

Major MacKAY. It will. It will make the appropriation available to pay the additional pay to a small group of officers who do not now receive it.

Senator LENROOT. Is that substantial in amount?

Major MacKAY. It is not; no.

Senator LENROOT. It would not affect your estimate?

Major MacKAY. No; this amount would cover it.

Senator LENROOT. One other question. Under the so-called War Department plan will there be no reduction in the aviation officers?

Major MacKAY. It is not anticipated that there will be any material reduction, although there will no doubt be a reduction in the number of officers of the Air Service.

Senator LENROOT. As you add \$1,000,000 for that purpose, if there is any reduction there would be a proportionate reduction for this purpose, should there not?

Major MacKAY. There should be a slight reduction.

Senator WADSWORTH. You see, Major, your estimates are based on 13,000 officers for the full year, are they not?

Major MACKEY. Yes, sir.

Senator WADSWORTH. You would there pay 13,000 officers for the full year, and under the terms of the Pershing bill—

Major MACKEY (interposing). It will be 12,531. This item can stand a proportionate reduction.

Senator WADSWORTH. At best it would be very small?

Major MACKEY. It would be very small. Then, too, the proposed legislation provision increases to some extent the number of flying officers.

Senator LENROOT. Major, how are you going to arrive at the pay here of 12,000 based on 12,500? They have to come from somewhere. You are estimating on 13,000. If this committee says 12,500, you have got to cut it off somewhere. Where will we let it apply? If it is 12,000, where will we let it apply?

Major MACKEY. I will insert it.

NOTE.—A proportionate reduction in the amount required for aviation increase to officers would be as follows:

Officers:	
12,531-----	\$964, 000
12,000-----	923, 000
11,500-----	885, 000
11,000-----	846, 000

Senator LENROOT. All the way through?

Major MACKEY. All the way through.

On the next item there is a reduction. This amount provides for the average of 12,531 officers; and I think you will find it is in minor items, such as aviation increase, that reductions have not been made.

PAY OF OFFICERS FOR LENGTH OF SERVICE.

Senator WADSWORTH. The next is additional pay of officers for length of service.

Major MACKEY. The 12,531 officers will require \$6,047,821 instead of the \$6,590,110 originally estimated for.

Senator LENROOT. How did the House arrive at \$4,000,000?

Major MACKEY. I do not know how they arrived at that amount. I think they simply took a flat amount and inserted it. I can not see how they arrived at it, but I will make an analysis of that amount also.

NOTE.—It is estimated that the number of commissioned officers and warrant officers in the grades for which the House bill makes provision will require \$4,543,652 for longevity pay.

Senator WADSWORTH. That reduction is due in part to the reduction in the personnel. As soon as a man goes on the retired list he stops drawing longevity pay?

Major MACKEY. Yes. This item is for officers on the active list. Longevity increase to retired officers is included in the item of pay for retired officers.

Senator WADSWORTH. If he is discharged with a year's pay, of course, the whole pay ceases?

Major MACKEY. I notice that this amount is the same as was appropriated for the purpose for 1922.

Senator WADSWORTH. \$4,000,000 was appropriated in 1922.

Senator LENROOT. Is that enough?

General LORD. You see, they have given here just what we have in the appropriation bill for the current year.

Senator WADSWORTH. Was the \$4,000,000 enough?

Major MACKEY. It looks as though there will not be enough for this year, but during 1923 a large number of emergency officers get their first longevity pay.

Senator WADSWORTH. Every emergency officer who entered the Army prior to July 1, 1917, or nearly all of them, will get his first longevity pay on July 1, 1923, is not that the idea?

Major MACKEY. Yes; and throughout the year they will keep coming into the first longevity period, so practically every officer will at some time during the year draw this additional pay.

Senator WADSWORTH. Do they count the period between the time of their discharge from service and their commission in the regular service?

Major MACKEY. No, sir; they do not.

Senator WADSWORTH. Then I do not think there should be so many who have completed five years at the beginning of the next fiscal year.

Major MACKEY. By the time the fiscal year is over, though, they will begin to draw longevity pay.

Senator LENROOT. Longevity pay is a percentage of the grade pay?

Major MACKEY. Yes; it is 10 per cent for each 5 years up to 20 years.

Senator LENROOT. Then demotions will affect that?

Major MACKEY. Yes; if demotions take place they will get the longevity pay on the pay of the lower grade.

Senator LENROOT. I wish, Major, you would put into the record just what it is going to cost us this year in addition to the \$4,000,000, as nearly as you can estimate it?

Major MACKEY. All right, I will do that.

NOTE.—The records of the office of the Chief of Finance show that during the period from July 1 to December 31, 1921, there was paid from 1922 funds the sum of \$1,888,571.72 on account of longevity pay to officers. Due to the fact that the pay of all officers for the first six months of the fiscal year does not appear in the accounts of disbursing officers for that period, and to other causes, it is believed that the above amount represents the longevity pay of the officers of the Army for five and one-half months. On that basis the cost for longevity pay to officers for the fiscal year 1922 will amount to \$4,120,520.

PAY OF ENLISTED MEN.

Senator WADSWORTH. The next item is pay of enlisted men.

Major MACKEY. We ask that the amount be restored to the amount of the original estimate, which is \$67,931,094.

Senator WADSWORTH. That is pay for 150,000 men?

Major MACKEY. That is to pay 150,000 men, which includes 318 flying cadets, but it is exclusive of the Philippine Scouts.

Senator WADSWORTH. Is the \$48,863,088 appropriated by the House the correct figure for the pay of 115,000 men in accordance with the permanent law?

Major MACKEY. I have not worked out what the House provision will do.

General LORD. We will do that for all these provisions and give you a table covering it. You want these all based on permanent law?

The amount required for the pay of 115,000 enlisted men, exclusive of the temporary increase under the act of May 18, 1920, is \$51,514,121. Including the temporary increase the amount is \$54,392,155. The House bill provides for a lesser strength than 115,000.

Senator WADSWORTH. Yes. I assume that it is reasonably accurate. That would give the enlisted men pay in accordance with the statute of 1917; it would bring about a very substantial reduction in the pay of the three upper grades of the noncommissioned personnel, with the loss of 20 per cent increase.

General LORD. Yes.

Senator WADSWORTH. And also a certain ration commutation which the temporary law of May, 1920, gives.

Major MACKAY. It will also bring the third and fourth grades to the same rate of pay, the only difference now being the difference in the ration.

Senator WADSWORTH. The third grade gets the ration and the fourth grade does not?

Major MACKAY. Yes, sir.

Senator WADSWORTH. All right; take the next item.

ENLISTED MEN OF NATIONAL GUARD.

Major MACKAY. The next item is \$100 for pay of enlisted men of the National Guard.

Senator WADSWORTH. That is merely to keep the appropriation alive in case the National Guard is called into service?

PAY OF ENLISTED MEN IN ENLISTED RESERVE CORPS.

Major MACKAY. Yes. The next item is pay of enlisted men in Enlisted Reserve Corps. The House cut that down to \$100. The revised estimate is for \$258,000, which provides for the training of 10,000 men for 15 days.

Senator LENROOT. You have not the men in the Enlisted Reserve Corps?

Major MACKAY. We have not that number now, but we expect to get them.

Senator LENROOT. You have not any?

General LORD. Two hundred and eighty-one.

Senator WADSWORTH. How about the next item?

AVIATION INCREASE TO ENLISTED MEN.

Major MACKAY. The next item, aviation increase to enlisted men, we ask that that be restored to the original amount of \$250,000.

Senator WADSWORTH. How many men enjoy that increase under your estimate?

Major MACKAY. This \$250,000 will provide additional pay for approximately 595 men.

Senator WADSWORTH. How many would the House provision permit you to give extra pay to?

Major MACKAY. It would be a proportionate reduction; about 360 men.

Senator WADSWORTH. What is the current appropriation?

Major MACKAY. The current appropriation is \$150,000.

Senator WADSWORTH. Did you run short?

Major MACKEY. The reports that we have up to date do not indicate that we will run short.

Senator WADSWORTH. Why do you ask for \$250,000 then?

Major MACKEY. We have incomplete reports, Senator; we haven't got our reports in from all places. This was the amount requested by the Chief of the Air Service, and I understand he has appeared before you and stated the need for this amount.

Senator LENROOT. I see from your House testimony it is controlled by the amount of the appropriation?

Major MACKEY. The amount of the appropriation controls it.

General LORD. If he gets this money he will qualify this number of flying men.

Senator LENROOT. It says no more than \$150,000 was spent, because the Air Service did not permit the men to fly. They only permit the men to fly when they have money to take care of it.

Major MACKEY. They take the amount appropriated and allot so much to each unit, which must stay within the limits allotted to it.

Senator WADSWORTH. Will you remind us, Major, what are the provisions of Public Resolution No. 59 of the Sixty-sixth Congress?

Major MACKEY. That provided that no more enlistments would be permitted until the Army was reduced to a certain strength.

PAY OF ENLISTED MEN, PHILIPPINE SCOUTS.

Senator WADSWORTH. The next item—pay of enlisted men, Philippine Scouts.

Major MACKEY. We are asking that the amount be restored to \$1,249,272, which was the amount originally estimated for.

Senator WADSWORTH. Was that for 7,800 men?

Major MACKEY. That is for 7,882 men.

Senator WADSWORTH. Do you only have 7,000?

Major MACKEY. We have approximately 7,000 to-day.

Senator WADSWORTH. Would the \$1,046,000 pay the 7,000 men?

Major MACKEY. That would pay for approximately 7,000 men: 6,991 men, to be exact.

Senator LENROOT. Has the number of Philippine Scouts been stationary for a number of years?

Major MACKEY. Practically so, I believe.

Senator LENROOT. Is the proposed increase in number due to the proposed withdrawal of some of our Regular troops?

Major MACKEY. I assume it is, although I do not know. But the War Department directed that estimates be prepared for that number.

Senator WADSWORTH. The next item.

ADDITIONAL PAY FOR LENGTH OF SERVICE TO ENLISTED MEN.

Major MACKEY. The next item is additional pay for length of service to enlisted men. We are asking for the \$4,736,460 which the House cut to \$4,500,000. We are simply asking for the amount originally estimated for.

Senator LENROOT. That is a fixed liability?

Major MACKEY. That is a fixed liability.

Senator LENROOT. The House cut \$1,000,000 below the current appropriation.

Major MacKAY. I presume that their cut was based on the theory that the Army would be reduced to 115,000. The \$4,500,000 will be sufficient for 115,000 men.

Senator LENROOT. That was what I was going to ask. Have you any surplus this year?

Major MacKAY. We will not use. I think, all of the money appropriated for this purpose.

Senator LENROOT. Of course, your estimate is down very much below the appropriation.

Major MacKAY. Generally speaking, there will be a saving in the pay of enlisted men. We have not used the amount appropriated because we have not had the men.

Senator WADSWORTH. You have not recruited them?

Major MacKAY. We have not recruited them.

Senator WADSWORTH. The next item.

PAY OF OFFICERS ON RETIRED LIST.

Major MacKAY. The next item is for the pay of officers on the retired list, \$6,000,000. We are asking that that be restored to \$6,000,000 in place of the \$5,000,000 passed by the House.

Senator WADSWORTH. Is the \$5,000,000 the amount of the current appropriation?

Major MacKAY. The \$5,000,000 is the amount of the current appropriation.

Senator WADSWORTH. In view of the fact that each and every one of the schemes proposed entails an increase in the number of retirements, I do not see how last year's appropriation can pay the retired officers for next year.

Senator LENROOT. Is there a net increase in the retired list from year to year?

Major MacKAY. It is gradually increasing.

Senator WADSWORTH. Major, if the Pershing bill, so called, goes through you will have some hundreds added to the retired list?

Major MacKAY. Yes. Since the House bill was passed I went over this situation. I took the actual payments we made for the month of November and applied that rate for the rest of the year, and to that amount added \$836,000, which I estimated the Pershing bill would add to the retired list, and the amount ran over the \$6,000,000, but inasmuch as this is the amount that went through the Budget Bureau, the amount originally estimated for has not been increased.

Senator LENROOT. And that will take care of the retirements under the Pershing bill if this goes through?

Major MacKAY. Yes; it will take care of it. If the clause authorizing all of the money appropriated under "Pay of the Army" to be disbursed as one fund is permitted to remain, it will take care of the retirements under the Pershing bill.

Senator LENROOT. That may be, but that does not furnish much information to the committee. We want to know whether the item here will take care of it or not.

Major MacKAY. It will slightly exceed the estimate.

Senator LENROOT. Of expenditures?

Major MacKAY. The expenditures will exceed the \$6,000,000.

Senator WADSWORTH. Did I understand you to say a moment ago under the provisions of the House bill for retirement and elimination considerably more than \$6,000,000 would be needed?

Major **MACKEY**. Yes; I have not figured the effect of the House bill on this item, but more would be needed, I am sure.

Senator **WADSWORTH**. Because at present you can only guess, really. You know it will be more?

Major **MACKEY**. Yes.

Senator **WADSWORTH**. But you could not tell how many would be retired, how many discharged on one year's pay, and how many demoted, etc.?

Major **MACKEY**. No; but it will increase this item to a greater extent than the Pershing bill increases it, so I know it will run over \$6,000,000.

Senator **WADSWORTH**. The next item.

INCREASED PAY, RETIRED OFFICERS ON ACTIVE DUTY.

Major **MACKEY**. The next item is "Increased pay, retired officers on active duty." That item has been reduced to \$79,702 instead of the \$365,120 which was asked for.

Senator **WADSWORTH**. Tell us about that. It is so unusual that I must have the story. In other words, the department is going to cease employing quite a number of these retired officers on active duty as a matter of policy?

Major **MACKEY**. Yes, sir; that is it.

General **LORD**. They return to the inactive list. The War Department has already returned a great many to the inactive list.

Senator **WADSWORTH**. Next.

PAY OF RETIRED ENLISTED MEN.

Major **MACKEY**. The next item is for the pay of retired enlisted men. We are asking that the \$5,000,000 originally estimated be restored.

Senator **WADSWORTH**. Is that number increased?

Major **MACKEY**. Yes, sir; that number is increasing.

Senator **WADSWORTH**. Has it increased beyond the rate of increase reflected in the House appropriation of \$4,500,000, as contrasted with the current appropriation of \$4,800,000?

Major **MACKEY**. The indications are that the payment under this item for this year will run around \$4,800,000.

Senator **WADSWORTH**. Payments this year?

Major **MACKEY**. Yes, sir; for 1922.

General **LORD**. Up to and including December 31 it was \$2,365,938.31, and there is not included in that all of the payments. You see, we do not get the returns from the Philippines and some of the other outlying stations, so as to be included, but that is the actual disbursements of record in our office up to and including that date.

Senator **WADSWORTH**. Next item.

PAY OF RETIRED ENLISTED MEN ON ACTIVE DUTY.

Major **MACKEY**. The next item is "Payment of retired enlisted men on active duty." We ask that the \$16,896 be restored.

Senator **WADSWORTH**. Do you happen to know, Major, on what basis the appropriation of \$2,904 was made by the House? I have not had time to go through all the House hearings.

Major **MACKEY**. That is for the same number of retired enlisted men on active duty less the temporary increase. In other words, the temporary increase takes up most of this \$16,000.

Senator WADSWORTH. Temporary increase in pay?

Major MACKEY. Yes.

Senator WADSWORTH. Does that explain in large measure the multiplication of the appropriation by five times?

Major MACKEY. Yes.

Senator WADSWORTH. The temporary increase of pay was only a little over 20 per cent in the highest grades. There must be an increase in number.

Major MACKEY. The temporary increase for a first sergeant amounts to \$127.20 a year.

Senator WADSWORTH. Per man?

Major MACKEY. Per man, which equals \$13,992.

Senator WADSWORTH. For 109 men?

Major MACKEY. For 110 men. Then the retired enlisted men get commutation of quarters, clothing, and rations.

Senator WADSWORTH. When on active duty?

Major MACKEY. No; I mean when they are on the retired list they get \$15.75 commutation of quarters, clothing, and rations, which in a measure offsets the 25 per cent difference between their active pay and retired pay.

Senator WADSWORTH. How many men will this \$2,900 pay?

Major MACKEY. It will pay 110 men.

Senator LENROOT. It will pay 110 men?

Major MACKEY. It will pay 110 men on the basis of 1908 rates of pay, exclusive of the temporary increase.

Senator LENROOT. Do not the enlisted men get 25 per cent more for active duty over their retired pay?

Major MACKEY. Yes; an enlisted man gets 25 per cent more than his retired pay, that is true, but while he is retired he gets commutation of quarters, clothing, and rations amounting to \$15.75 per month, which decreases the difference between his active pay and his retired pay.

Senator WADSWORTH. Then, the \$2,904 is correct for the old schedule of pay?

Major MACKEY. Yes; for the old schedule.

Senator WADSWORTH. Do they not get that commutation of quarters?

Major MACKEY. While they are on the active list their quarters and rations are furnished from Quartermaster Corps appropriations, but while they are on the retired list their commutation for rations and clothing is paid from pay of the Army.

Senator LENROOT. That is, it is paid out of the appropriation for retired pay?

Major MACKEY. Yes.

Senator LENROOT. Their commutation for quarters?

Major MACKEY. Yes.

Senator LENROOT. Then, is the increase of 25 per cent over pay and allowances?

Major MACKEY. The increase is over pay. The \$15.75 commutation is in addition.

Senator WADSWORTH. And yet you say the \$2,904 would pay 110 men on the basis of the 1908 pay?

Major MACKEY. Yes, sir.

Senator WADSWORTH. And that will include commutation for quarters and subsistence?

Major MACKEY. No; the commutation of quarters and rations is taken into consideration; that is, the commutation of rations and quarters while they are on the retired list is taken into consideration.

Here is the situation: We will assume a man gets \$100 a month. When he is placed on the retired list he gets 75 per cent of that amount, or \$75. In addition to the \$75, he gets \$15.75, which brings his pay on the retired list up to \$90.75. Now, the difference between the \$90.75 and \$100 is \$9.25, which is the amount used as the multiple of the 110.

Senator WADSWORTH. Then, the item as drafted by the House would only pay the man \$9.25?

Major MACKEY. That is right.

Senator WADSWORTH. And you say there are 110 men?

Major MACKEY. Yes; I used the \$100 as an illustration.

Senator WADSWORTH. They would get the rest of their pay from another item?

Major MACKEY. They would get the rest of their pay from the pay of retired enlisted men.

Senator WADSWORTH. The \$5,000,000 that you ask for?

Major MACKEY. Yes.

Senator WADSWORTH. Now, how about your estimate? Is the same observation true with respect to your estimate? Does that \$16,896 include only the difference between their retired pay plus the commutation of rations and quarters and their active-service pay plus the temporary increase?

Major MACKEY. Yes. That \$16,896 is simply the difference.

Details of the item of increased pay and allowances to retired enlisted men on active duty.

	Per month.	Per year
Active duty pay:		
Base pay.....	\$53.00	\$636.00
Longevity pay.....	21.20	254.40
Total, permanent rates.....	74.20	890.40
Temporary increase, act May 18, 1920.....	10.60	127.20
Grand total.....	84.80	1,017.60
Retired pay (old rate):		
Base pay.....	51.00	612.00
Continuous service pay.....	24.00	288.00
Total, prior to retirement.....	75.00	900.00
Retired pay, 75 per cent of active pay.....	50.25	603.00
Commutation of quarters, clothing, and rations.....	15.75	189.00
Grand total.....	72.00	870.00
Total annual active pay (permanent rates).....		900.00
Total annual retired pay and allowances.....		870.00
Difference.....		30.00
Difference between active pay and retired pay and allowances, \$26.40×110, equals.....		2,904.00
Temporary increase, \$127.20×110, equals.....		13,992.00
Total.....		16,896.00

RETIRED PAY CLERKS.

Senator WADSWORTH. Yes; now I have it. Next item.

Major MACKAY. The next item is unchanged, pay of retired pay clerks, \$13,500.

The same thing is true of retired veterinarians.

ARMY FIELD CLERKS.

The next item is for pay of Army field clerks, which has been covered by Colonel Davis this forenoon.

NOTE.—The revised estimate provides for 9 Army field clerks at \$2,000, 43 at \$1,800, 77 at \$1,600, 106 at \$1,400, and 140 at \$1,200; 79 messengers at \$720; and the temporary increase to 375 field clerks at \$240, making a total under this item of \$681,880 instead of \$682,200 carried in the Budget estimates.

FOREIGN SERVICE.

The next item is additional pay for foreign service of Army field clerks. We are asking that the amount originally estimated for be restored to \$3,338, instead of \$3,000 carried by the House.

Senator WADSWORTH. I assume the \$3,000 was appropriated in view of the reduction made by the House in the number of Army field clerks?

Major MACKAY. Presumably.

Senator WADSWORTH. Next.

COMMUTATION OF QUARTERS, HEAT, AND LIGHT.

Major MACKAY. The next item is for commutation of quarters, heat, and light, Army field clerks. We are asking that the amount of \$155,338 be restored instead of the \$97,000 carried by the House.

Senator WADSWORTH. I assume the same observation holds good of that as to the one just before?

Major MACKAY. I presume so; \$97,000 will cover commutation for the number of field clerks carried in the bill.

The next item is unchanged, the commutation of quarters, heat, and light for field clerks, Quartermaster Corps.

CONTRACT SURGEONS.

The next item, contract surgeons, is unchanged.

Senator WADSWORTH. The department, we understand, accepts the \$41,000?

Major MACKAY. That is the amount originally estimated for.

Senator WADSWORTH. Next.

PAY OF NURSES.

Major MACKAY. The next item is pay of nurses. We are asking that the amount be restored to the \$746,520 originally estimated for.

Senator WADSWORTH. General Ireland has testified to us on the question of the nurses, as to their numbers. The House bill would restrict the number of nurses to 500. I assume that that 500 would have to be paid on the old rate of pay.

Major **MAC KAY**. All of the House figures are on the basis of the old rate of pay.

Senator **WADSWORTH**. Your estimate is based upon the temporary rate now in force?

Major **MAC KAY**. Yes, sir.

Senator **WADSWORTH**. Next.

PAY OF HOSPITAL MATRONS.

Major **MAC KAY**. Next item, pay of hospital matrons, is unchanged, \$3,000.

EXPENSES OF COURTS-MARTIAL.

The next item, expenses of courts-martial, we are asking that the amount of our original estimate, \$88,413, be restored.

Senator **WADSWORTH**. The current appropriation is \$87,500. You are asking for approximately \$1,000 increase. Are there more courts-martial or are they more expensive to carry on for any reason than they were formerly?

Major **MAC KAY**. The basis of the estimate, Senator, was on a per capita cost. During 1916 the per capita cost was 56 cents per man, and 157,882 multiplied by 56 cents gives \$88,413, the amount we asked for. Does that answer your question?

Senator **WADSWORTH**. It tells us how you made the estimate, but that is some time ago—1916—and it was supposed that under the revision of the Articles of War there would be fewer courts-martial per thousand of men, we will say, than there used to be. Senator **LENROOT** was on that special committee, and I think he will bear me out on that head.

Major **MAC KAY**. On the other hand, the compensation of reporters has been increased since 1916, which would probably offset any decrease in the number of courts convened.

Senator **HARRIS**. That is, the item of reporters is the largest item of expense, is it?

Major **MAC KAY**. That is the largest item in expense.

Senator **LENROOT**. That item is dependent on the size of the Army to a considerable degree.

Major **MAC KAY**. It is dependent on the size of the Army. The other payments made from this item are for the pay of civilian witnesses attending courts.

Senator **WADSWORTH**. Next.

COMMUTATION OF QUARTERS, HEAT, AND LIGHT.

Major **MAC KAY**. The next item is commutation of quarters, heat, and light. The estimate originally submitted was for \$6,437,560, which the House cut to \$4,250,000. Our revised estimate is for \$5,582,508.

Senator **WADSWORTH**. I do not want to engage in a long discussion, General Lord, of this item, but I do not know what official of the War Department would be the proper one to appeal to. Perhaps your department might examine in it, you being the financial manager, as it were. I wish sometime you or some one would make a study of the cost of commutation of quarters for the Army on one side and

then study of an investment in quarters to be built to do away with a larger portion of this item, and see where the Government would come out in its annual expenditures.

General LORD. A study has been made in my office along that very line, and the conclusion was that at the present price of construction nothing could or should be attempted, but the General Staff is now making, if it has not completed it, a very careful study of the question of commutation of quarters, heat and light to see where we can make savings and what the proper solution of it is to result in the best economy for the Government, and I will take that up with the Chief of Staff and see if that study is in a condition so that it can be submitted to you for your information.

Major MACKEY. This item is based on the reduced personnel covered by the Pershing bill.

Senator WADSWORTH. Your revised estimate is based on that?

Major MACKEY. Yes, sir.

Senator WADSWORTH. I assume that the House appropriation is based on their reduced personnel.

Major MACKEY. Presumably, although the cut in this item is greater in proportion than the cut made in the personnel.

Senator WADSWORTH. You had \$5,000,000 this year. How is it running?

Major MACKEY. On December 31 we had spent more than half of it, \$2,551,654.94. That amount will probably be increased as other reports come in.

Senator WADSWORTH. Next.

INTERESTS ON SOLDIERS' DEPOSITS.

Major MACKEY. The next item is for interest on soldiers' deposits which is unchanged, \$100,000.

Senator HARRIS. When the Government pays them, they deposit it with the postmaster or the company officers?

Major MACKEY. No; they deposit it with the finance officer.

Senator HARRIS. At the post where they are stationed?

Major MACKEY. Yes, and on his discharge the Government repays him the amount deposited plus interest at 4 per cent for the time he has had it on deposit.

General LORD. We have on deposit to-day \$3,300,457.

Senator WADSWORTH. 4 per cent interest on that \$132,000.

General LORD. It will not all be paid this year. We have paid about \$100,000 in interest for a number of years. No one knows when there might be withdrawals; they might be large this year or they might be less than they were last year.

Senator WADSWORTH. You do not pay it semiannually?

General LORD. No; as the man is discharged he is paid the amount of his deposit with interest.

Senator WADSWORTH. I suppose the money is deposited by you where it draws interest?

General LORD. No; it is the Treasury of the United States. It is carried there as a trust fund.

Senator WADSWORTH. Is there anything in the law that prohibits it being deposited in a United States depository?

General LORD. The matter was taken up under Secretary of War Garrison and given a good deal of study, and a recommendation was

made to the Secretary of War that it be invested or placed where it would draw interest, but it was decided by the then Secretary of War that nothing of that sort would be done.

Senator WADSWORTH. Do you happen to recollect the reasons assigned for that decision?

General LORD. One reason was that it is as much value in the Treasury as the interest they could secure on it outside. The money, of course, is carried in general funds of the Treasury.

Senator HARRIS. He said it was kept as a trust fund, did he not?

General LORD. It is kept as a separate account, but, of course, it forms part of the deposits in the Treasury.

Senator HARRIS. It is not kept separate as a trust fund then?

General LORD. As I remember it, one of the reasons for not adopting some such procedure as has been suggested was that it might not be available for payment to the depositor at the time it called for. It might be out of the control of the Government. So, while it is kept as a trust fund, I do not suppose they set aside in the Treasury the amounts deposited for this particular purpose, but it is available like all funds in the Treasury not otherwise appropriated for the Treasury's current needs. I can send you a copy of the report that was made at that time if you would like to see it.

Senator WADSWORTH. We would be glad to see it. I would personally like to see it. It need not be put in the record.

Senator HARRIS. I would like to see it and see the Secretary's ruling.

Senator WADSWORTH. Would you like to have it inserted in the record?

Senator HARRIS. No; not unless you want it.

Senator WADSWORTH. Other special funds of the Government draw interest, do they not?

General LORD. They are placed out with the Federal reserve banks; yes. This question was discussed before our present Federal reserve system was adopted and there might be another conclusion reached at this time.

Senator WADSWORTH. I should think it might well be brought up again in the department.

General LORD. I will have it looked into and make a report to the chairman of this subcommittee as a matter of information, if you would like it.

Senator WADSWORTH. Very well.

PROPOSED DEPOSIT LEGISLATION.

NOTE.—On May 15, 1872, Congress passed "An act to establish a system of deposits to prevent desertion and to elevate the condition of the rank and file of the Army," which, with acts amendatory thereto, has created the system of deposits of soldiers' savings now in force in the Army.

The act directs that for any sums not less than \$5 so deposited for the period of six months or longer, the soldier, on his final discharge, shall be paid interest at the rate of 4 per cent per annum.

At the time of the passage of the act a rate of interest of 4 per cent was not disadvantageous to the Government in view of the fact that the Secretary of the Treasury was at that time selling 4 per cent, 4½ per cent, and 5 per cent bonds.

In passing upon a tentative estimate by items for the amount needed as pay of the Army for the fiscal year 1916, Secretary of War Garrison said: "It seems to me that the law should be changed so as to enable us to put this

money out at interest and give the enlisted men the exact amount of interest we get on it and nothing more, and the Government ought not to advance any interest whatever."

Pursuant to instructions issued by Secretary of War Garrison the following tentative draft of legislation to carry into effect the Secretary's suggestion was submitted with estimates for the fiscal year 1917:

"Any enlisted man of the Army may deposit his savings, in sums not less than \$5, with an Army quartermaster who will furnish him a deposit book in which shall be entered the name of the quartermaster and of the soldier, and the amount, date, and place of such deposit. Such deposits shall be accounted for by quartermasters in the same manner as public funds, and shall be deposited in the Treasury of the United States to the credit of the board of trustees created by this act. The fund so accruing, together with the soldiers' deposit fund existing when this act takes effect, shall be known as the Army deposit fund and repayment of deposits shall be made therefrom to the depositors only upon their discharge from the Army or when they are furloughed to the Army Reserve, or to the heirs or legal representatives of a deceased soldier, and said deposits shall not be subject to forfeiture by sentence of court-martial, but shall be forfeited by desertion, and shall be exempt from liability for such soldiers' debts: *Provided*, That the Government shall be liable to the depositors for the amounts so deposited.

"There is hereby created a board of trustees for the control, supervision, and administration of the Army deposit fund, consisting of the Secretary of War, the Secretary of the Treasury, and the Attorney General, severally, acting ex officio, who shall place the moneys of said fund out at interest by depositing the same in such banks that are subject to either Federal or State supervision and examination as shall offer the best rates of interest and with such forms of security as the board may prescribe and deem adequate for the safety and prompt repayment of the moneys so deposited, upon demand, with interest: *Provided*, That banks shall not be required to maintain in respect of such deposits a lawful money reserve as provided for in sections 5191 and 5192 of the Revised Statutes of the United States: *And provided further*, That there shall be retained by the board of trustees and kept with the Treasurer of the United States, who shall be the treasurer of the board, a sufficient working balance of the Army deposit fund from which soldiers' deposits maturing under the provisions of this act may be paid.

"The board of trustees shall from time to time ascertain the average rate of interest earned and accruing to the Army deposit fund and shall fix the rates accordingly to be paid on soldiers' deposits upon the maturity and repayment of such deposits. The board of trustees shall make such regulations as may be necessary for carrying out the purposes of this act.

"All laws or parts of laws inconsistent with the provisions of this act are hereby repealed: *Provided*, That nothing herein contained shall affect the rights of soldiers in respect of deposits made under the law existing before this act shall become effective, and if the rate of interest earned on the Army deposit fund shall not be sufficient to pay them the full 4 per centum per annum, the deficiency shall be paid by the Treasurer of the United States out of public funds not otherwise appropriated."

Pursuant to existing law, the amount deposited by enlisted men of the Army is deposited in the Treasury of the United States as a separate fund known as "Pay of the Army deposit funds." It has been ascertained that these funds are placed in general funds of the Treasury Department and are used when and where needed to meet current obligations. When requisitions are made upon the Treasury Department for money pertaining to this fund for the purpose of repaying soldiers the amounts deposited by them, checks issued against such credit are paid by the Treasury from general funds.

Pages 19 to 22. Hearings before the Committee on Military Affairs, House of Representatives, Army appropriation bill, 1917, indicate that the suggested legislation was discussed, and it is apparent from this discussion that the members were apprehensive with reference to the dissatisfaction that would be caused in the event that only 2 per cent or 3 per cent would be paid under the proposed method. The proposed legislation was not included in the Appropriation bill for that year.

Major MacKay. The next item is pay of the expert accountant, which is unchanged.

FOREIGN-SERVICE INCREASE TO OFFICERS.

The next item is foreign-service increase to officers. The revised estimate is for \$210,533 instead of the \$409,000 which was originally estimated for. That is due to the withdrawal of the troops from Germany.

Senator WADSWORTH. And you will bring some back from the Philippines with you in the fall?

Major MACKEY. Yes, sir. This amount will pay the foreign-service increase to 822 officers.

Senator WADSWORTH. I think certain Coast Artillery detachments will be brought back from the Philippines.

Major MACKEY. Yes, sir.

Senator WADSWORTH. Do they get foreign-service pay?

Major MACKEY. They get foreign-service pay when on duty beyond the limits of the United States except in Hawaii, Porto Rico, and Panama. They get the 10 per cent increase at all other places.

Senator WADSWORTH. That really means Europe, the Philippines, and China?

Major MACKEY. And the military attachés serving in foreign countries.

Senator WADSWORTH. Next.

FOREIGN-SERVICE INCREASE TO ENLISTED MEN.

Major MACKEY. The next item is foreign-service increase to enlisted men. The revised estimate is for \$812,233 instead of the \$1,767,240 originally estimated for.

Senator WADSWORTH. That reduction is due largely to the same cause.

Major MACKEY. For the same reason.

PAYMENT OF EXCHANGE.

The next item is the payment of exchange. The amount is the same, but we would like that there be inserted on page 21, line 22, after the word "Alaska" the words "or remote posts in the United States."

Senator WADSWORTH. That is interesting. What is the object of that?

Major MACKEY. The object is to permit the disbursing officer at Fort Apache, Ariz., to get currency on his official checks from a bank at Cooley, Ariz., instead of having the money shipped by express to either Holbrook or to Winslow, which is some 90 or 130 miles away from Fort Apache.

Senator WADSWORTH. You mean this bank has not sufficient resources to meet his checks?

Major MACKEY. It is a new bank which is located at Cooley, and they have declined to furnish the disbursing officer with funds unless they can be reimbursed with what it costs them to get the money to Cooley.

Senator LENROOT. It is not a national bank, then?

Major MACKEY. No; it is not national bank. A railroad runs down to Cooley from Holbrook, but they make only two trips a week and they do not carry express.

Senator WADSWORTH. Just to keep the charter?

Major. MACKEY. It is a new railroad. The proposed method will be more economical than the shipment to Holbrook, and in addition to that it saves two or three days' time of an officer and escort going from the post to Holbrook or to Winslow and return. No additional amount is asked for as the cost will only be about \$1.12 per thousand, to cover insurance and registered mail.

Senator LENROOT. This provision, as it reads, is it a matter of legislation or has it been in the bill?

General LORD. It has been in the bill for many years, except the last phrase, which was put in in 1917 to enable us to do business overseas.

Senator LENROOT. But there is no current law on the subject?

General LORD. I think not; just an appropriation item.

Senator WADSWORTH. Next.

Major MACKEY. The next item, pay for mounts, is unchanged and so are the other three items.

PAY OF CLERKS AND OTHER EMPLOYEES.

Pay of clerks and other employees in the finance department, we are asking the estimate be restored to the amount originally submitted, \$1,276,000.

General LORD. But that supplemental estimate of \$500,000 should be added to that. I have been in touch with the office of the Attorney General; and the Attorney General, or a representative from his office, wishes to come before the committee to show their interest.

Senator LENROOT. There will be a supplemental estimate?

General LORD. It has already been prepared.

PAY OF ARMY—USE AS ONE FUND.

I would like to take up right here, where it belongs, Mr. Chairman, the restoration in the bill of the blanket provision that has always followed this appropriation for pay of the Army. You will find it on page 22; in your print it is placed at the right hand of the sheet. It reads as follows:

All the money hereinbefore appropriated for pay of the Army and miscellaneous shall be disbursed and accounted for as pay of the Army, and for that purpose shall constitute one fund.

Ever since I have been connected with the Pay Department of the Army, afterwards with the Quartermaster Corps, and now with the Finance Department, that provision has been a part of this bill. I can not overstate the inconvenience and trouble occasioned by the elimination of that paragraph. I thought possibly I could illustrate it in this way:

An enlisted man in the Air Service on duty in Manila who is discharged is paid on a voucher called a final statement, which is intricate enough at best under our present system of pay and the regulations and the law. Now, to pay that man under this condition we would pay him his base pay, his longevity pay, his foreign-service pay; if he has a deposit, interest on deposit; aviation increase; possibly commutation of quarters, heat, and light; and possibly something might be due him for court reporting; then, in addition to that,

on the final statement, which are not under this appropriation, his traveling allowances and what is due him for clothing.

With the elimination of this provision, the only method of preventing the incurring of deficiencies would be to apportion everywhere where men are discharged little dribblets from these independent appropriations, which is, in fact, impossible. The solution really would be to instruct disbursing officers in the last half of the year, or last quarter, to refrain from paying these men anything except their base pay and instruct them to submit claims for the rest. The amount of bookkeeping that is involved is enormous. The elimination of this means we should set up on our books 27 additional independent appropriations with which we must keep an account from day to day, and yet all these are statutory provisions. The man is entitled to it, and the Government must pay him eventually. If we do not pay him, after he is out of the service he must collect on claims for each one of these shortages of payment.

Senator WADSWORTH. This is the first time it has been proposed to eliminate this?

General LORD. It is the first time it has reached the stage of being dropped out of the bill. A year ago there was some discussion in the House Appropriation Committee on this paragraph, and I replied to it about as I have done here, and apparently effectually at that time, because nothing was done toward leaving out this provision.

Senator WADSWORTH. As the bill passed the House last year was it left out?

General LORD. It was not.

Senator WADSWORTH. Did you discuss this with the House Appropriations Committee this year?

General LORD. I did not, because we did not expect it would be left out. Major McKay says it was taken up at one time during the hearings there, and he called their attention to the inconvenience and expense that would occur by leaving that provision out of the bill. I do not see what can be gained by it. These are statutory provisions, the great proportion of them, and we must pay the amounts obligated, whether there is money enough or not. It must be paid eventually, because we are under contract to pay it.

Senator HARRIS. It would save a good deal of expense of bookkeeping, would it not?

General LORD. Yes; really a great deal of expense of bookkeeping and a great deal of bother and inconvenience, not only here but all through the field everywhere, for the payment of these statutory allowances.

Major MacKAY. On page 316 of the House hearings some discussion on the subject appears.

General LORD. The same thing obtains relative to the National Guard appropriations. They have had for some years a similar basket clause that went out of the bill as it came from the House a year ago, the Army appropriation bill, was restored in the Senate, and then in conference a modification put in by which they could utilize by transfer a certain percentage of the amount of each of the items. Their provision also should be restored in the interest of orderly procedure and good bookkeeping.

We already have had to get legislation to enable them to get through this year within their appropriation, and there is coming

through a request for additional legislation for this year to enable them to continue; that is, permitting them to transfer from one of their items which was formerly interchangeable to, I think, their transportation item.

Senator LENROOT. There is this distinction, however, is there not, General, between those items and this item, that this is all statutory and not within control at all?

General LORD. Some of the miscellaneous items are not statutory; some of the miscellaneous items are subject to administrative control.

Senator LENROOT. Which ones of them?

Senator WADSWORTH. That payment of exchange.

General LORD. Payment of exchange, expenses of courts-martial, finance personnel. Of course, these other items are in a way subject to administrative control, to be frank about it; for example, foreign service. If the War Department did not order officers and men overseas, we would save something on the 20 per cent for enlisted men and 10 per cent for officers. Once they are ordered on foreign service they become entitled to the foreign-service pay under the law.

Senator LENROOT. I had a note here that this should be inserted between lines 3 and 4 on page 22.

Senator WADSWORTH. Yes; that was my suggestion at the previous hearing. The suggestion of the department is that it be inserted after line 19 on page 22. We thought it would be just as well, if not better, to put it after line 3.

General LORD. That would eliminate from its application the three pension items and the Finance Department. We do not object to that; that is, we are not concerned about it. We are willing you should do it.

PAYMENT OF THE CLAIMS OF OFFICERS, ETC.

Senator WADSWORTH. The Chairman of the Appropriations Committee, Senator Warren, is in receipt of a letter from the Secretary of War, under date of April 19, as follows:

WAR DEPARTMENT,
Washington, April 19, 1922.

The CHAIRMAN COMMITTEE ON APPROPRIATIONS,
United States Senate.

SIR: I have the honor to inclose herewith a copy of a letter, addressed by the department to the Comptroller General of the United States, March 28, 1922, together with a copy of his reply thereto, dated April 5, 1922, which deal with the matter of making funds available during the fiscal year 1923 to enable prompt payment of the claims of officers, members of the Nurse Corps, and enlisted men for pay and allowances growing out of service in the World War.

For the reasons set forth in the accompanying correspondence it is requested that there be inserted in the Army appropriation bill, fiscal year 1923, a provision to read substantially as follows:

"Provided, That so much of the unexpended amount of the appropriations for pay, etc., of the Army for the fiscal year 1919 and for the fiscal year 1920 as may be necessary to permit payment for the adjustment and settlement of claims of officers, members of the Nurse Corps, and enlisted men for pay and allowances growing out of service in the World War from April 6, 1917, to June 30, 1919, and from July 1, 1919, to June 30, 1920, inclusive, shall remain upon the books of the Treasury to the credit of those appropriations until June 30, 1923."

Respectfully,

JOHN W. WEEKS,
Secretary of War.

That letter was referred to Mr. McCarl, the Comptroller General:
 THE COMPTROLLER GENERAL OF THE UNITED STATES,
Washington, D. C.

MY DEAR MR. COMPTROLLER GENERAL: The Army appropriation act for the fiscal year ending June 30, 1922 (Public, No. 27, p. 10), contains a provision—

"That so much of the unexpended amount of the appropriation for pay, and so forth, of the Army for the fiscal year 1919 as may be necessary to permit payment for the adjustment and settlement of claims of officers, members of the Nurse Corps, and enlisted men for pay and allowance growing out of service in the World War from April 6, 1917, to June 30, 1919, inclusive, shall remain upon the books of the Treasury to the credit of that appropriation until June 30, 1922."

This provision has enabled, and will enable until June 30, 1922, the prompt payment of claims for pay and allowances growing out of service in the World War from April 6, 1917, to June 30, 1919, as in the absence of the provision such claims would necessarily have been subject to certification to Congress for an appropriation prior to actual payment thereof.

The provision, *supra*, will expire with June 30, 1922, and similarly the appropriations for the fiscal year 1920 will not be available for disbursement after that date. Therefore, in the absence of some further legislation, no moneys will be available to effect payment after June 30, 1922, of claims for pay and allowances growing out of service in the World War.

The unsettled claims now on file in this department are less than 2,000 in number and it is fully expected that all of these claims will be disposed of prior to June 30, 1922. While the number of claims now on file in the General Accounting Office is not known, it is understood that new claims are being received daily which would naturally lead to the thought that all of these World War claims for pay and allowances will not be settled by June 30, next.

In the interests of the officers, members of the Nurse Corps, and enlisted men who served during the World War, and who may have unsettled claims on June 30, 1922, it seems to me that some provision should be made whereby those claims, when allowed, may be paid without the delay which would necessarily result if an appropriation had to be obtained to effect the actual payment thereof.

If it meets with your approval, this department proposes to request the chairman of the Appropriations Committee, United States Senate, to insert in the pending War Department appropriation bill for the fiscal year 1923, a provision to read substantially as follows:

"*Provided*, That so much of the unexpended amount of the appropriations for pay, etc., of the Army for the fiscal year 1919 and for the fiscal year 1920, as may be necessary to permit payment for the adjustment and settlement of claims of officers, members of the Nurse Corps, and enlisted men for pay and allowances growing out of service in the World War from April 6, 1917, to June 30, 1919, and from July 1, 1919, to June 30, 1920, inclusive, shall remain upon the books of the Treasury to the credit of those appropriations until June 30, 1923."

I would thank you to advise me whether you concur in the foregoing proposed action, and if so, whether you suggest any change in the language of the draft of legislation.

It is proper to state that this matter has been presented to the Director, Bureau of the Budget, who advises that the proposed legislation is not in conflict with the financial program of the President.

Sincerely yours,

JOHN W. WEEKS, *Secretary of War.*

And the Comptroller General in his letter states:

GENERAL ACCOUNTING OFFICE.
 OFFICE OF COMPTROLLER GENERAL OF THE UNITED STATES,
Washington, April 5, 1922.

THE SECRETARY OF WAR.

SIR: I have your letter of the 28th instant, in which you say that, if it meets with the approval of this office, your department proposes to request the chairman of the Appropriations Committee, United States Senate, to insert in the annual War Department appropriations bill for the fiscal year 1923 a provision to read substantially as follows:

"*Provided*, That so much of the unexpended amount of the appropriations for pay, etc., of the Army for the fiscal year 1919 and for the fiscal year 1920 as may be necessary to permit payment for the adjustment and settlement of claims of officers, members of the Nurse Corps, and enlisted men for pay and allowances growing out of service in the World War from April 6, 1917, to June 30, 1919, and from July 1, 1919, to June 30, 1920, inclusive, shall remain upon the books of the Treasury to the credit of those appropriations until June 30, 1923."

You ask to be advised whether this office concurs in the proposed action, and if so, whether any change in the language of the draft of legislation is suggested.

The Army appropriation act for the fiscal year ending June 30, 1922, contains a like provision reading as follows:

"That so much of the unexpended amount of the appropriation for pay, etc., of the Army for the fiscal year 1919 as may be necessary to permit payment for the adjustment and settlement of claims of officers, members of the Nurse Corps, and enlisted men for pay and allowances growing out of service in the World War from April 6, 1917, to June 30, 1919, inclusive, shall remain upon the books of the Treasury to the credit of that appropriation until June 30, 1922."

This latter provision has enabled and will enable until June 30, 1922, the prompt payment of claims for pay and allowances growing out of service in the World War from April 6, 1917, to June 30, 1919, but the provision will expire June 30, 1922, and similarly the appropriations for the fiscal year 1920 will not be available for disbursement after that date, with the result that claims arising between April 6, 1917, and June 30, 1920, must be certified to Congress for an appropriation prior to actual payment thereof, and it is to avoid this condition that you now propose the legislation first above referred to.

I concur in your proposed action without suggestion of any change in the language of the draft of legislation. If enacted into law, it will save much correspondence which necessarily comes from delay in payment after a settlement has been made, and this should be avoided if possible. I may say that when the matter comes before the proper committee of Congress, either on the House or Senate side, and it is believed that anything may be accomplished by the appearance of a representative of this office before the committee, I will be glad to see that such representation is arranged.

I earnestly hope that the proposed bill may be enacted into law in the interest of a speedy and immediate payment of claims after settlement and certification have been made.

Sincerely yours,

J. L. McCARL, *Comptroller General*.

General LORD. May I say a word about that, Mr. Chairman?

Senator WADSWORTH. Yes.

General LORD. After the signing of the armistice we had many queries and claims for moneys due soldiers and enlisted men and some officers as to failure to have allotments paid at home, although the money had been deducted from their pay—shortages of all sorts. For many years the Treasury Department, the accounting officials of the Treasury, had assumed jurisdiction over the claims of parties who had been separated from the Government service; that is, the War Department had no jurisdiction over claims submitted by men who had gone out of the service, whether officers or enlisted men. We inquired down at the General Accounting Office and found they had an accumulation there of about 10,000 claims, and they were rapidly piling up as the men came from overseas, and they were absolutely snowed under. The Chief of Finance took it up with the Auditor of the War Department and the Comptroller of the Treasury and suggested, as he had the records and plenty of clerks at that time, while it was not our job, we probably could settle these claims quicker than they could, and the accounting officers authorized us to go ahead. We have settled something over 240,500 of those claims. The General Accounting Office has now resumed the

settlement of these claims and has taken the job off our hands. We have settled all of them with the exception of about 500, which we will close up in a couple of weeks.

The appropriation was continued last year to enable us to pay those claims. That appropriation will expire on June 30 next. The only way the claims that are now on file in the Comptroller General's office can be settled, unless this legislation asked is provided, will be to send each individual case to Congress. I suppose there are several thousand of them of small amounts. So that this proposed legislation is really in the interest of the Comptroller General, who must settle the claims. It originated in our office, however, and has his approval. Really, it is an important matter and will save a great deal of trouble for the Comptroller General's office and for Congress.

Senator WADSWORTH. At what point should it go in the bill?

General LORD. Following "Pay of the Army."

Senator WADSWORTH. General Lord, do you not think it might well go in on page 25 at the end of the finance chapter, as it were?

General LORD. That is all right; at the end of the claims.

Senator WADSWORTH. Is there anything else, General Lord. you want to speak of?

MILEAGE.

General LORD. Mileage, page 23.

Major MACKEY. The original estimate submitted for mileage amounted to \$2,000,000. There has been a supplemental estimate submitted which has come through the office of the Director of the Budget of \$500,000 for additional mileage, making a total of \$2,500,000 we are asking for.

Senator WADSWORTH. What is the reason for that increase?

Major MACKEY. The reason for the increase is to provide for the traveling expenses of the officers of the Regular Army and of reserve officers ordered to active duty. For the 10 years preceding the war, 10 years prior to 1917, the average per capita cost of mileage to officers amounted to over \$116 per annum, and that per capita cost applied to the 12,531 officers makes \$1,453,596. Then it is contemplated to order during the year 21,211 officers of the reserve corps on active duty, at an average cost of \$50 each. That will cost \$1,060,000, making a total of \$2,514,146. The estimate asked for is \$2,500,000.

General LORD. The original estimate submitted, Mr. Chairman, was \$3,000,000. That was cut by the Budget officer to \$2,000,000. The appropriation for the current fiscal year is \$1,875,000.

There has been reported to the Director of the Budget \$575,000 of this as a saving. That saving was made because a year ago we provided for the calling out of Organized Reserve officers, but that was not done, so it was the Secretary of War's wish that we should keep faith with Congress and set aside the proportionate amount that would have been used for the Organized Reserve had we called them out; so there is in the hands of the Director of the Budget and will not be touched \$575,000 saving out of this. The \$1,300,000 that is left for the Army—and I have been watching it very closely—will barely get us through this year.

You will remember the chief of the chaplains said he made a trip to the various camps to see how the religious welfare of the men was looked out for and that he made the trip without expense to the Government. His allotment for mileage had been exceeded, but he succeeded in financing this trip from outside sources. We have watched the mileage so closely that some activities have been terminated or restricted that perhaps it might have been wise to have carried on. But with the greatest care the \$1,300,000 will barely take us through this year and perform the things we should do.

Senator WADSWORTH. I suppose the House is figuring on this reduction to 1,100 officers.

General LORD. The \$2,000,000, based on our experience this year, is apparently too small, and the Secretary of War and Director of the Budget, on the presentation of facts, approved a supplemental estimate of \$2,500,000.

Senator WADSWORTH. Your revised estimate of \$2,500,000 is based on 12,500 officers?

Major MACKAY. Yes, sir; and 21,211 reserve officers.

General LORD. The Organized Reserve will cost approximately \$50 per capita.

Major MACKAY. That is \$25 going from and \$25 returning to their homes.

Senator LENROOT. With reference to the provision the House has made for the Officers' Reserve, if that should be adhered to by this committee, then what would the estimate be?

Major MACKAY. That amount for reserve officers can be proportionately reduced.

Senator LENROOT. Let me get from you how much of this \$2,500,000 is for mileage of reserve officers.

Major MACKAY. \$1,060,000.

For the permanent establishment it is-----	\$1, 453, 596
For the reserves-----	1, 060, 550

Making a total of-----	2, 514, 146
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which has been cut to an even \$2,500,000.

Senator LENROOT. Now, Major, you say this is based upon 12,500 officers, and yet you are spending this year for a larger number of officers only \$1,300,000.

Major MACKAY. Yes; but things are tied up now; we can't move them.

Senator LENROOT. There is as much necessity for tying up this next year as there was this year.

Major MACKAY. Things are tied up and officers can not be moved on account of lack of transportation funds to move their household goods and pay for the transportation of dependents. There are a number of orders held up until July 1, when the new appropriation will be available to transport the household goods and families of officers.

Senator LENROOT. But I think there is going to be the same condition and the same acute need for economizing in every possible direction next year as there was this year.

Major MACKAY. There are certain provisions of law which require an officer to serve one year in five with troops, and these changes are bound to take place in order to comply with the law.

Senator LENROOT. Yes; but there is a great deal of discretion in transfers as to the expense that is incurred in a transfer.

Major MACKEY. That is true, but for 10 years preceding the war the average cost ran over \$116 an officer. Now that, it seems to me, we can not escape. It is over a long period of years and it is a fair average, I think.

Senator WADSWORTH. There is this to be said, that railroad rates were a good deal lower then.

Major MACKEY. Well, of course, the mileage to officers was the same, 7 cents per mile, so that the cost from the appropriation would be the same now as then.

Senator WADSWORTH. Does not transportation in kind come out of this?

Major MACKEY. Transportation in kind is furnished to officers on their request, but a deduction is made from their mileage accounts of 3 cents per mile over that portion of the journey for which transportation is furnished. An officer gets 4 cents a mile when Government transportation is furnished, and 7 cents when no transportation is furnished, and that has been in effect for a number of years, so that the cost to the appropriation is the same, regardless of the commercial cost of transportation. It is 7 cents a mile for every mile traveled. Of course, that 3 cents a mile is recouped to transportation of the Army.

Senator WADSWORTH. All right, Major; what is the next—claims for damages?

Major MACKEY. Captain Denning will take that up.

CLAIMS FOR DAMAGES TO AND LOSS OF PRIVATE PROPERTY.

Captain DENNING. In the item on page 23, beginning at line 10, you notice the House has put in a limitation of \$500 in amount. The House also reduced the estimate from \$150,000 to \$50,000, and the House has also stricken out the clause making the funds immediately available and to remain available until expended.

These claims are of four classes:

First, those which have been approved by the accounting officers and await merely the appropriation of funds for their payment.

Second, those which have been recommended by the War Department and are awaiting final action by the General Accounting Office. These claims are listed at their face value in anticipation that they will not be materially reduced by the General Accounting Office.

Third, those which are pending in the General Accounting Office of the Chief of Finance, War Department, which are taken at about one-half their face value, to allow for normal reduction which will be made by this office.

Fourth, the estimated additional amount of claims that will be received and settled by June 30, 1923.

There are now in the hands of the Treasury for payment 363 claims, in the amount of \$96,916.88, and in the General Accounting Office 21 claims, in the amount of \$4,942.56. In the office of the Chief of Finance 70 claims, aggregating in round figures \$30,000, on which it is estimated that a 50 per cent allowance will be made, or \$15,000, making a total of claims now on hand of \$116,859.44.

Additional claims will be received and settled by June 30, 1923, it is estimated, approximating \$57,000, making a total of claims under that item of \$173,859.44, for which the department asks \$150,000. The House reduced that to \$50,000.

Senator WADSWORTH. Well, when they did that, of course, they prevented the payment of a claim in excess of \$500?

Captain DENNING. Yes, sir.

Senator WADSWORTH. Would that have the effect of throwing such a claim into Congress for legislation?

Captain DENNING. It would have the effect of requiring them to be certified to Congress; yes, sir.

Senator LENROOT. How large a claim would you take jurisdiction over?

Captain DENNING. \$1,000 is suggested as the maximum amount to be allowed to be passed to the General Accounting Office for settlement.

Senator LENROOT. That is, you would increase this \$500 to \$1,000?

Captain DENNING. Yes, sir.

Senator WADSWORTH. Do you have many over \$1,000?

Captain DENNING. We now have claims aggregating \$68,772 over \$1,000, each one amounting to over \$1,000, to which should be added an estimate of claims to be received amounting to \$25,000.

Senator LENROOT. You had one of \$20,000 a couple of years ago?

Captain DENNING. Yes, sir.

Senator WADSWORTH. If that maximum was fixed at \$1,000 would you still ask for \$150,000 appropriation?

Captain DENNING. If the limitation is changed from \$500 to \$1,000 we estimate it will require \$80,000.

Senator LENROOT. Well, that is your suggestion here—\$80,000?

Captain DENNING. Yes, sir; that is the figure we place it at, \$80,000, and the limitation raised to \$1,000 instead of \$500.

Senator WADSWORTH. Do you still want to make it immediately available and to remain available until expended?

Captain DENNING. Yes, sir; that legislation should be continued.

Senator WADSWORTH. Do you mean you have run short of your appropriation of \$300,000 for the current year?

Captain DENNING. I will have to furnish that information, Senator.

The appropriation of \$300,000 was for "Claims of officers, enlisted men, and nurses of the Army, for destruction of private property."

The appropriation for this item is \$100,000 for the current fiscal year.

Senator LENROOT. I notice some testimony in the House hearing—"This is the status of the current appropriation: The total amount available on July 1, including the appropriation of \$100,000, was \$101,314.84. That has been exhausted by claims which have been paid."

Captain DENNING. Yes, sir.

Senator LENROOT. It was carried in two items?

Captain DENNING. No, sir. This appropriation was carried in but one item.

Senator WADSWORTH. Anything else on that?

Captain DENNING. That is all on that item.

Senator WADSWORTH. The next—transportation of wounded and otherwise disabled.

Captain DENNING. I think you had that item discussed by General McRae the other day, and he recommended the elimination of the item.

ARREARS OF PAY, BOUNTY, ETC.

The next item is "Arrears of pay, bounty, etc." It is recommended that it be restored to the amount of the estimate, \$2,000.

Senator WADSWORTH. For what reason?

Captain DENNING. It is based on the request of the General Accounting Office, which is outlined on page 352 of the House hearings in a brief statement at the bottom of that page. Shall I read it.

Senator WADSWORTH. If it is not too long.

Captain DENNING (reading):

The following information is furnished by the General Accounting Office:

The amount (\$1,000) which was appropriated for arrears of pay and bounty for the fiscal year 1921 was exhausted on January 5, 1921. To cover the deficiency on account of payments under this appropriation from January 5, 1921, to June 30, 1921, the sum of \$1,369.49 was appropriated under deficiency acts, as follows:

Mar. 1, 1921.....	\$555.22
June 16, 1921.....	759.38
Aug. 24, 1921.....	54.89
Total	1,369.49

Of the amount appropriated for arrears of pay and bounty for the fiscal year 1922, namely, \$1,000, \$670 has been used to date, January 23, 1922, leaving a balance of \$330 available for the payment of claims under this appropriation that may arise from said date to June 30, 1922.

The department thinks that the amount appropriated should be \$2,000 to take care of any of these old claims for arrears of pay, bounty etc. (certified claims), which may be presented during the fiscal year 1923.

Pay, etc., of the Army, War with Spain, remains the same. No change is recommended.

I think personnel in the office of the Chief of Finance has been discussed.

Senator WADSWORTH. Yes; that has been discussed.

CHANGE OF NAME FROM "CAMP BENNING" TO "FORT BENNING."

Captain DENNING. Now, on page 39, line 23, the word "camp," preceding the word "Benning," should be changed to "Fort," so that it will read "Fort Benning."

Senator WADSWORTH. Has that been changed?

Captain DENNING. That has been changed by administrative action in the War Department.

Also, the same changes should be made on pages 74 and 75; on page 74, in line 24, and on page 75, in line 4.

Senator WADSWORTH. Is there anything else?

GENERAL SERVICE SCHOOLS, FORT LEAVENWORTH.

Captain DENNING. The department also recommends on page 8, line 18, under the general service schools, Fort Leavenworth, Kans., that the word "or" following the word "technical," in line 18, be

stricken out. and the words "and clerical" added after the word "special."

The reason for making this request is to allow the employment of clerical and stenographic help when needed at the schools. It would not increase the amount of the appropriation, but the finance department has ruled that under the law they are not allowed to employ that class of services.

Senator WADSWORTH. Do you not suppose they are really employing them under some other heading, now?

Captain DENNING. I do not know, sir.

Senator WADSWORTH. I can not conceive how the schools at Fort Leavenworth could get along without a clerk or two.

Captain DENNING. It is thought that they may be using the services of enlisted men, which is, perhaps, not the best thing to do, because the enlisted men who are members of the detachments on duty at the schools are needed in connection with the work.

Senator WADSWORTH. What is next?

CONTINGENCIES OF THE ARMY.

Captain DENNING. On page 4, line 19, the word "and" after the word "approval," should be changed to the word "or."

The reasons for suggesting this change are that the General Accounting Office is now suspending all vouchers payable from "Contingencies of the Army" on the ground that they have not received the approval of the Secretary of War, as required by the current appropriation law. Heretofore it had been acceptable to the accounting officers upon submission of an official copy of the authority of the Secretary of War.

The present requirement results in considerable delay in the payment of bills, for the reason that it is necessary for finance officers to send their vouchers from points in the field to the Secretary of War for approval before payment can be made by them to meet the requirements of the General Accounting Office. Expenditures to a considerable extent are made from this appropriation without the continental limits of the United States—Coblenz, Germany, and China, for example; thus, the delay in meeting such a technical requirement in the wording of the act can be appreciated.

The unnecessary signing of many papers by the Secretary of War would be eliminated, as under the word "or" the authority alone would be sufficient.

Prior to the act of April 27, 1914, making appropriations for the support of the Army during the fiscal year 1915, the phrase "under the immediate orders of the Secretary of War" was used in the wording of the act making appropriations for "Contingencies of the Army." Beginning with the fiscal year 1915 the words "approval and authority" were inserted, but the accounting officers of the Treasury and the General Accounting Office, War Department division, had not ruled that the individual vouchers be approved until about a year ago. Prior thereto it had been acceptable to the accounting officers if an official copy of the authority of the Secretary of War be attached to the vouchers.

They are suspending those accounts now, requiring that they be sent to the Secretary of War for his direct approval before payment is made.

Senator WADSWORTH. All right.

Captain DENNING. That is all that I have here now, Mr. Chairman.

Senator WADSWORTH. Have you anything else?

Captain DENNING. I may have two or three other things to present to you after the rivers and harbors people are through, if that is satisfactory to you.

Senator WADSWORTH. We will adjourn now until to-morrow morning.

(Thereupon, at 5.40 o'clock p. m. the subcommittee adjourned until to-morrow, Friday, April 21, 1922, at 10.30 o'clock a. m.)

WAR DEPARTMENT APPROPRIATION BILL, 1923.

FRIDAY, APRIL 21, 1922.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10.30 o'clock a. m.

Present: Senators Wadsworth (chairman), Warren, Jones of Washington, Lenroot, Spencer, McNary, Fletcher, Harris, and Caraway.

Also Brig. Gen. Harry Taylor, United States Army, Assistant to the Chief of Engineers; Col. T. Q. Ashburn, United States Army, Assistant Chief Inland and Coastwise Waterways Service, War Department; Theodore Brent, in charge of operation of Mississippi-Warrior River Barge Line, under Inland and Coastwise Waterways Service, War Department; and others.

WAR DEPARTMENT,
OFFICE OF THE CHIEF OF CHAPLAINS,
Washington, April 25, 1922.

HON. JAMES W. WADSWORTH, JR.,
United States Senate, Washington, D. C.

DEAR SENATOR WADSWORTH: When I was making my statement before the Senate subcommittee on appropriations last week Senator Lenroot asked how many chaplains there were in the Army before the war, and I answered that there was one chaplain for each regiment and 12 for the Coast Artillery. I would like to modify that statement.

I find that on April 6, 1917, there were in service 74 chaplains. The national defense act of June 22, 1916, section 15, made provision for one chaplain for each regiment of Cavalry (25), Infantry (64), Field Artillery (21), and Engineers (7), and one for each 1,200 officers and men of the Coast Artillery Corps (25). Under the provisions of this act there was authority, therefore, for 142 chaplains, and appointments were rapidly being made into the Regular Army when the sudden expansion called for by the war occurred.

The present act would reduce the number of chaplains below the number that was provided before we had the benefit of the lessons of the war.

Very sincerely yours,

JOHN T. AXTON,
Colonel, United States Army, Chief of Chaplains.

RIVERS AND HARBORS.

STATEMENT OF HON. JAMES A. REED, A SENATOR FROM THE STATE OF MISSOURI.

Senator WADSWORTH. Gentlemen, Senator Reed is here this morning, and desires to discuss certain matters in connection with rivers and harbors appropriations, which will be found commencing on page 114 of the committee print of the bill.

TRANSPORTATION FACILITIES, INLAND AND COASTWISE WATERWAYS.

Senator REED. Mr. Chairman, I do not want so much to discuss the proposition myself as to have some facts submitted to the committee by Colonel Ashburn and Mr. Brent, who are carrying on transportation on the Mississippi and Warrior Rivers. I think the committee and Congress will be interested in having these facts.

The appropriation allowed by the House was much larger than was originally recommended by the supervisor of Congress—I have forgotten his title—

Senator FLETCHER. The Director of the Budget?

Senator REED. The Director of the Budget. The policy of cutting down river and harbor appropriations which we had to adopt at the beginning of the war has been carried into this bill, although this bill in some respects is better than some of those we have had before us in the past two or three years.

It seems to me we have reached a new phase of the river proposition. That phase is the navigation of these streams. I am not going to make an argument to the committee. I simply want to state the points that I want to have brought out here.

We have been tinkering with that question for a good many years, and it has been tinkering. We might just as well undertake to test the possibilities of a railroad by laying the ties and not putting any rails on them, and then inquire how much traffic has passed over the line, as to improve a river for a few miles and then leave a sand bar that boats can not pass over. You might just as well undertake to test the possibilities of a great business—the iron or steel industry, for instance—by setting up a blast furnace modeled after the blast furnaces of a century ago, and say that it was not now prospering in competition with up-to-date institutions and therefore the enterprise should be abandoned, as to test these rivers by what has been done, because the appropriations have never been sufficient; the work has never been completed on a single one of these streams.

That is the idea that I want to have presented here, and I want to illustrate it. I do not know how many years ago it was, but at a time whereof the memory of man runneth not to the contrary they started to improve the Ohio River by putting in a series of dams. Manifestly, until those dams were all completed there could not be navigation of the Ohio River, except in little spots between the dams. I think they have been 20 years at that work or more. They have built 25 or 30 dams—more than that; I am not trying to speak accurately—and now have about five or six to complete, and until the five or six are completed the traffic of the Ohio River can not get out into the Mississippi River.

That is not a criticism of the War Department. The War Department has been willing to build these dams if it had had the money.

General TAYLOR. Senator, may I make just a point there?

Senator REED. Yes.

General TAYLOR. You speak of having no completed stream. The Monongahela is a completed improvement. Last year we had 24,000,000 tons of freight on it. In the case of the Ohio you have understated the number a little bit.

Senator REED. But the Monongahela is not completed in the broad sense, because it is like a railroad that begins nowhere and

ends nowhere, instead of being part of a great through waterway system, and in that sense I am correct; but I thank you, General, for the correction.

I have just one more preliminary word to say.

We have reached the point in this country where the railroads can not handle the peak load and handle it properly; and either we ought to take up this river-improvement business on a big, broad scale or we ought simply to abandon these rivers and quit talking about them. I am not going to ask, as far as I am concerned, that the \$42,000,000 be increased this year, though that is not because it ought not be increased. It ought to be \$500,000,000, and we ought to go at it and complete this work. I do not mean that for these rivers alone \$500,000,000 should be appropriated, but the river and harbor appropriation bill ought to carry that much money; but I am going to ask that an additional sum of money be appropriated for the purpose of completing and carrying on the boat-line business now on these rivers. Mr. Brent has been engaged in conducting this river transportation, and is very familiar with it, and Colonel Ashburn is here, also; and I want to ask you if you will not hear them this morning in regard to that matter.

Senator JONES of Washington. Senator, what you want, then, is to increase the item on page 115 for inland waterway transportation facilities from \$30,000?

Senator REED. Yes.

Senator JONES of Washington. The estimate is \$330,000, and the House gave \$30,000.

Senator REED. Yes. If I can, I want to get this committee to raise the general sum.

Senator JONES of Washington. I know; but you said you were not going to ask that, but this other particular thing.

Senator McNARY. What item are you now talking about?

Senator FLETCHER. The item on page 115—transportation facilities, inland and coastwise waterways.

Senator REED. Gentlemen, this is Colonel Ashburn, who is in charge of the Mississippi and Warrior River service.

Senator WADSWORTH. All right, Colonel; we shall be glad to hear you.

STATEMENT OF COL. T. Q. ASHBURN, ASSISTANT CHIEF, INLAND AND COASTWISE WATERWAYS SERVICE, WAR DEPARTMENT.

TRANSPORTATION FACILITIES, INLAND AND COASTWISE WATERWAYS.

Colonel ASHBURN. The Inland and Coastwise Waterways Service is asking for \$330,000. This amount was passed by the Budget committee and approved by the President. He wrote a special letter to the House asking that we be given the \$330,000. I explained, when I was here before the committee before, that \$30,000 of that alone is for the purpose of running the office and the office expenses in Washington. That is the sum total, and that includes not only the employees but the general office expenses. That is the total overhead expense in Washington, and sometimes it is not all used. It was not all used this year. It was less than \$30,000.

MISSISSIPPI-WARRIOR LINE.

The Mississippi River section is a very paying proposition. The line running from St. Louis to New Orleans is paying well. It is carrying an immense amount of freight. For the last three months—January, February, and March—it carried approximately 180,000 tons of freight on a revenue running up to nearly \$200,000 a month.

Senator FLETCHER. If this bill stays as it is, you will have only \$30,000, which will cover your office expenses here?

Colonel ASHBURN. That is all.

Senator FLETCHER. You have nothing for operating the line?

Colonel ASHBURN. No; the Mississippi line can carry itself. Under the law we have to carry the Warrior River service, too, and a line which runs from New Orleans to Mobile, which is the connecting line.

Senator LENROOT. I should like to have you put the exact figures in the record.

Colonel ASHBURN. I have them here.

Senator LENROOT. You do not need to do it now. Just put them into the record, so that we can have the details.

Senator JONES of Washington. I should like to have now the aggregate of operating expenses and receipts.

Colonel ASHBURN. I have it all here.

Senator REED. Will you pardon me a minute? If you will just let the Colonel make his preliminary statement of what he wants. I am going to ask then that these figures be put in the record in regular order.

Colonel ASHBURN. I have them right here. I can give them to you at any time.

Senator REED. That is all right.

Colonel ASHBURN. The general proposition is that the law says that we shall operate the Mississippi and the Warrior sections. The President's orders are that we shall not create a deficit, and I think that is also the law. I am not certain as to that. We have asked for \$300,000 for this reason: The Warrior River is losing considerable money. It is losing less money each month. The loss is coming down. Last month it lost only \$15,000, whereas last year it lost as much as seventy or seventy-five thousand dollars a month. The profits that we make on the Mississippi River are spent in carrying on the Warrior River.

This \$300,000 is asked for as an emergency appropriation to keep us from having to stop in the face of a deficit. It is very easy to run into a deficit without knowing it. During the month of December there was a longshoremen's strike in New Orleans. We had 25 loaded barges out of our fleet of 40 laid up there for from 10 to 15 days. Each one of those barges was worth over \$100 or \$200 a day to us. We lost, just by this 10 days' strike, something over \$100,000. We had two bad accidents on the Warrior River. One boat broke in two and one boat scraped her bottom out. Those two together made a deficit of something like \$200,000, in round numbers.

Senator JONES of Washington. Did you replace those?

Colonel ASHBURN. Yes, sir; all of that has been done out of the money which we have taken in from the Mississippi River. If we should find that we were going to run into a deficit we would have

to stop. We have \$15,000,000 invested in the line itself. We have millions and millions of dollars invested in the river.

Senator JONES of Washington. In the Warrior River line, you mean?

Colonel ASHBURN. In the Warrior and the Mississippi together.

Senator JONES of Washington. In both?

Colonel ASHBURN. Yes.

Senator JONES of Washington. You would not have to stop both?

Colonel ASHBURN. We would have to stop the Warrior, but the law says we shall operate it.

Senator JONES of Washington. Yes; I understand.

Colonel ASHBURN. The whole point I make is that we may not need this \$300,000, but I should like to have the \$300,000 in the Treasury in case we found that we were going to run into a deficit, so that we would not have to stop operations when the \$300,000 would tide it over and enable us to make money.

Senator JONES of Washington. Are you making more on the Mississippi section than you are losing on the Warrior section?

Colonel ASHBURN. Yes, sir.

Senator JONES of Washington. How much more a month?

Colonel ASHBURN. It depends. We are getting in more money in cash, but we are charging off a lot of depreciation. The actual money coming in on the Mississippi over what is going out on the Warrior River in the last three months will probably average \$20,000 a month.

Senator JONES of Washington. Of course, there is nothing to prevent you from using your profits there in running the Warrior.

Colonel ASHBURN. No; we do use them.

Senator JONES of Washington. So that if you do continue to make more on the Mississippi than you lose on the Warrior, you will not need any of this \$300,000?

Colonel ASHBURN. No, sir; but we can not be sure.

Senator JONES of Washington. I understand. I just wanted to get that clear.

Senator REED. If you will pardon me, gentlemen, I want to get this, if I can, in such shape that the Senate will be able to understand it. I want to get clearly the two propositions, and get them separate. Can you answer these questions, Colonel, or can Mr. Brent do it best?

Colonel ASHBURN. Mr. Brent, I think.

Senator REED. Then, if you will let me get Mr. Brent a minute, I will ask him to make a statement to the committee.

Mr. BRENT. We are both available, Senator.

STATEMENT OF MR. THEODORE BRENT, IN CHARGE OF OPERATION OF MISSISSIPPI-WARRIOR BARGE LINE, INLAND AND COASTWISE WATERWAYS SERVICE.

TRANSPORTATION FACILITIES, INLAND AND COASTWISE WATERWAYS.

Senator REED. Mr. Brent, tell the committee briefly when the Mississippi River service was established, when you got your equipment, how you got it, and give them a brief story of the operations up to date on the Mississippi River.

Mr. BRENT. Gentlemen, briefly, during the war period, by a provision of the Federal control act, the President of the United States

was authorized to use any portion that he saw fit of the \$500,000,000 revolving fund given to the Railroad Administration for the purpose of operating inland waterways and for the purpose of equipping them; and, under that authority, through a department of the Railroad Administration created by the Director General of Railroads, three projects were authorized to be operated and equipped: First, the Mississippi; second, the Warrior; and third, the New York Barge Canal.

Senator SPENCER. That has since been discontinued?

Mr. BRENT. The third has been discontinued.

For purposes of administration, the Mississippi and the Warrior were placed under one management, and the headquarters of that management was placed in New Orleans as the focal point of the two operations. There was created out of that fund a fleet and certain terminal facilities, which in the aggregate up to this time have cost about \$13,500,000. That is the book cost. The operation began in September, 1919—

Senator FLETCHER (interposing). From what point to what point?

Mr. BRENT. Between St. Louis and New Orleans; and in December, 1919, from New Orleans and Mobile to the head of the Warrior River.

Senator McNARY. May I ask you a question there?

Mr. BRENT. Certainly.

Senator McNARY. Do you navigate the Warrior River up to the power plant?

Mr. BRENT. Yes; for about 20 miles beyond, to a point called Cordova, the junction of the Frisco Railroad and at the head of navigation.

The barges began to be received about 18 months ago. The power equipment was not completely received until December of last year; so that we have been operating up to the fall of 1921 with a war-time equipment, and not by any means with the equipment given us for the purpose of permanent operation. Therefore there have been very great deficits due to that fact.

In 1919 we carried 106,000 tons of freight on the Mississippi. I will speak of the Mississippi first because it is the more important of the two. In 1920 we carried 160,000 tons of freight. In 1921 we carried 432,000 tons of freight, and we are now carrying at the rate of about 650,000 or 700,000 tons a year, and the costs have gone down from an operating cost of about \$4 a ton to start with to a cost of \$2.67 per ton in December of last year.

Senator REED. Is that on the Mississippi?

Mr. BRENT. That is on the Mississippi, Senator. By law we are required to be subject, so far as our operations are concerned, to the interstate commerce law, and we must and we do operate as a common carrier. We are also subject, in so far as the all-water rates are concerned, to the Shipping Board.

Senator FLETCHER. What is your equipment?

Mr. BRENT. The equipment on the Mississippi River is a new fleet of 40 steel barges of 2,000 tons carrying capacity each, dead weight, and some five old and smaller barges which were gotten from the old Kansas City line.

Senator FLETCHER. Are these self-propelling barges?

Mr. BRENT. No, sir; these are cargo barges.

Senator FLETCHER. They are towed?

Mr. BRENT. Yes, sir. Then we have six new power boats of 2,000 horsepower each. Those are what is known as tunnel-stern propeller boats. They have the power of a 10,000-ton ocean-going ship.

Senator FLETCHER. How many of those have you?

Mr. BRENT. We have six of those. In addition, we have two older boats of the stern-wheel type, chartered from the Engineers—one large steel boat and two smaller boats.

Senator CARAWAY. With your power boats, how many barges can you tow?

Mr. BRENT. That is a "movable feast." When we have low water, it may be cut down by bars or by a narrow channel or other things which impede the progress of navigation. When we have a high river we can carry a very large amount downstream, but it impedes us somewhat on the upstream movement, so that it all varies from month to month. Our largest tow downstream has been some 15,000 tons. Upstream, every tow now is carrying over 5,000 tons, and we carry that amount of freight in from four to six barges.

Senator FLETCHER. Do you go loaded both ways?

Mr. BRENT. Senator, in the last two months we have had to carry barges downstream in order to bring back the upstream freight. That is a rather remarkable condition; but we are going full in both directions.

Under the requirements of the Interstate Commerce Commission, we are compelled not only—

Senator REED. Let us spend just a moment more on the equipment.

Mr. BRENT. Pardon me, sir.

Senator REED. You have 40 steel barges and 6 power boats, and I take it you regard those as up to date?

Mr. BRENT. Yes; they are very good.

Senator REED. And they can operate on pretty shallow water, can they?

Mr. BRENT. It is simply a question of loading them. They should have an 8-foot channel in order to load them to their full carrying capacity. We sometimes have to limit the loading to 6 feet in the full months, when the river is low.

Senator REED. Is this other equipment, which you speak of as old equipment, up to date, or do you operate that at a disadvantage?

Mr. BRENT. That is operated at a disadvantage, and we lay that up whenever the traffic is not sufficient to require it all.

Senator REED. If you were running this as a private enterprise to make money, would you or would you not get more steel barges and modern propeller boats?

Mr. BRENT. Yes, Senator; we would. First, we would get the steel barges, because at the present time our fleet is what we may term overpowered. We have more towboats now than we have barges to accompany them. Therefore, while we have nine towboats we only have five of them in operation regularly, because we can tow the entire fleet that we have with the five towboats, and we are limited in the amount of carryings by the amount of the barges.

Senator REED. Have you more freight offered now than you can handle?

Mr. BRENT. Very much more. I had a telegram from my office yesterday which said that we had 205 cars of sugar in New Orleans in cars, 65 cars on the dock, 2,000 tons of other freight waiting, and that we would not be able to take the upstream business that is offering this month by any means. Furthermore, in the grain season, on the southbound movement, we hardly touch it. We do not take one tithe of the amount that is offering and should be carried; and may I make this observation in that connection? We carried 435,000 tons of freight on the Mississippi last year, on which the saving to the public was \$1.35 a ton.

Senator REED. I want to come to that after a while. How is the channel of the Mississippi from New Orleans as far as Cairo?

Mr. BRENT. The channel is very good. We have about six weeks of fall weather when we have a narrow channel and when there are difficulties from sand bars. Otherwise, it is very good.

Senator REED. Sticking to this particular point, from Cairo to St. Louis, how is the channel?

Mr. BRENT. Narrow; tortuous.

Senator REED. And in operating your boats, carrying your fleet of barges, do you ever have to break them up when you get to Cairo in order to go on to St. Louis?

Mr. BRENT. We have to break our tows there. The large tunnel-stern boats will not operate in the upper river. They are too deep. They are deeper than the barges, and that makes a very dangerous condition. When you have a condition where your towboat is liable to stick and your barge to go on, you have the condition where you are liable to have very serious wrecks. Everybody can see that. If the towboat is stalled and the barges run on downstream, there may be a very serious result; so we have to use the lighter draft and smaller boats on the river between St. Louis and Cairo and make two or three trips there to one below.

Senator REED. Just make that a little plainer. You have to use the lighter draft boats, you say. I want to get that clear. If you are starting your large fleet of boats from New Orleans to St. Louis, if I understand you, when you get up to Cairo something happens. Now, what is it? Do you have to unload the boats there, or what do you do to go on up to St. Louis?

Mr. BRENT. No; the method of operation is to take a towboat and tie into a tow some five or six of these barges.

Senator REED. Where?

Mr. BRENT. At New Orleans. Then we go in tow formation, without breaking it, until we get to Memphis, where we may set out one barge and put in another one; and then we go on to Cairo, where we law down the entire tow in the mooring there and turn the towboat with another tow back to New Orleans and take the barges one or two at a time with a smaller towboat from there to St. Louis, on account of the smaller and more tortuous channel.

Senator FLETCHER. What is that distance?

Mr. BRENT. One hundred and eighty-six miles. I can explain it better by saying this:

The tow formation on the lower river is three barges abreast, which makes a tow 150 feet wide. It is frequently the case that we

have not width enough in the upper river to go through with one barge 50 feet wide. We sometimes have to get the engineers to come and help us dredge a channel through that place. We almost never can go up with three barges abreast.

Senator REED. When you say "the upper river," you mean from Cairo to St. Louis?

Mr. BRENT. That is what I mean by the upper river.

Senator REED. Does this breaking up of the barge fleet or tow very greatly increase the cost of transportation?

Mr. BRENT. Oh, yes. The breaking up costs money, and it is a more expensive operation to go over that 186-mile stretch with 2,000 tons or 3,000 tons or 4,000 tons of freight than it would be to go through with a tow of ten or fifteen thousand tons.

Senator REED. Certainly; and it makes delay, too, does it not?

Mr. BRENT. Very much.

Senator REED. Have the engineers estimates as to what it would cost to make this river from Cairo to St. Louis thoroughly navigable, so that you could take your entire fleet up?

Mr. BRENT. No, Senator; I have not that figure. I am not familiar with it. I think the engineers would have to enlighten you on that point.

Senator SPENCER. What would be necessary to make it navigable? Is it the depth or the width of the channel that is deficient?

Mr. BRENT. Both, Senator. We have a great deal of difficulty on account of narrow channel. Frequently we find the dredged 8-foot channel, but it has been silted up by reason of rises until it is only 10 or 15 or 20 or 30 feet wide, and you can not even move one barge through it without going in with your boats and working out the silt first.

Senator SPENCER. Is it possible that the river is shifting its course, that there is an 8-foot channel from Cairo to St. Louis constantly, but that it is shifting its course in such a way that the boats sometimes run aground, not because there is no channel, but because the pilot does not know just where the channel is?

Mr. BRENT. No. The engineers tell us that the channel is there, and I think we can usually find it; but it is frequently the case that the channel which was carefully dredged by the engineers is in one place, and what we may call the force of the stream is in an entirely different place. The stream, with its force of water, has found an entirely different place from that of the channel dredged by the engineers over certain bars, or in the last rise the channel has been so narrowed that we can not get through. It is both too narrow and too shallow.

Senator REED. I will get General Taylor to insert the figures. My recollection is that a very moderate amount of money would complete that channel.

Now, so that we can keep the whole fleet proposition separate, what is the situation on what is strictly called the upper Mississippi—that is, from St. Louis to St. Paul?

Mr. BRENT. I know nothing of that stream, sir. We have never operated above St. Louis.

Senator REED. I understand; but you know something about a boat line that has been projected up there, and that is what I want to know about.

Mr. BRENT. There has been equipment built which we understand to be calculated to operate on a draft of four and a half feet, and to carry some 3,000 tons when loaded to 7 or 8 feet; and that fleet of barges and towboats was designed for use in carrying ore and coal between St. Louis and St. Paul. That has not yet been put in operation.

Senator REED. What is the situation with reference to that equipment?

Mr. BRENT. During the war one Edward F. Goltra came to the President and made representations to him that St. Louis was badly in need of steel in order to serve the war purposes, and stated to the President that in his judgment ore could be brought from the Mesaba Range to St. Louis very cheaply if a fleet of boats were built to take it from St. Paul to St. Louis on the Mississippi River, and under the war urge the President authorized the then chairman of the Shipping Board to take at least \$6,000,000—I believe that has not been expended, however—of Shipping Board funds and turn it over to the engineers for the purpose of constructing a fleet for this purpose. Under that authority the engineers constructed 19 barges and 4 towboats.

Senator SPENCER. Those are not included in your War Department barges?

Mr. BRENT. They are not included in our equipment, and we have no jurisdiction over them. There was a contract drawn between the engineers and Mr. Goltra, and approved by the former Secretary of War, which gave to Mr. Goltra the right for a period of five years to operate those boats on the upper river, and that contract has in it clauses which permit him also to go into the lower river and to compete with the line which we now have. We do not know yet what is going to be done with that fleet, but the present statements are that it will be put in actual competition with the Government's fleet on the lower river.

Senator JONES of Washington. Do you know when that contract was approved?

Mr. BRENT. That contract, and a subsequent contract which gave Mr. Goltra the right to operate at 80 per cent of the railroad rates on the lower river, were approved on the last day of Mr. Baker's term in office—on March 4, 1921.

Senator JONES of Washington. In other words, the administration approved a contract under which a private barge company would operate barges in competition with the Government line?

Mr. BRENT. Government-owned barges.

Senator JONES of Washington. Government-owned barges?

Mr. BRENT. Yes; Government-owned barges, leased to a private individual under a contract under which he can put them in direct and destructive competition with the Government-owned line on the lower river.

Senator FLETCHER. Do I understand that they are not operating at all?

Mr. BRENT. We are not operating above St. Louis; and this fleet, under the statement of the lessee, will not be operated in the upper river.

General TAYLOR. May I correct Mr. Brent a little bit? I think the statement, as Mr. Brent made it, gave the impression that the

contract was made on the last day of the previous administration. The contract for the construction of those barges, as a matter of fact, was made early in 1919.

Mr. BRENT. I said nothing about the construction; I spoke of the operation.

General TAYLOR. That had nothing at all to do with the operation. The entire thing was covered in the original contract. The original contract provided, however, and it was intended, that the money was appropriated for operation on the upper river.

Mr. BRENT. That is true.

General TAYLOR. And everything, except the contract itself, referred to the barges for operation on the upper river. It was not intended at all that they should be operated in competition with the Government-owned fleet on the lower river. The contract provided that the barges should be operated as a common carrier, that the rates charged should not be above the railroad rates for corresponding distances, and that they should not be below the railroad rates without express permission of the Secretary of War.

In the spring of 1921 Mr. Goltra asked that the rates on the upper river be fixed at 80 per cent of the railroad rates, or that the rates established under his contract be made 80 per cent of the railroad rates, basing it on the fact that those were the rates charged by the barge line on the lower river, and he wanted to charge the same rates for work on the upper river—80 per cent of the rail rates. He now states, as Mr. Brent says, that he is going to use the boats on the lower river.

Senator JONES of Washington. Has he not authority under that contract to use them on the lower river at 80 per cent of the railroad rates, and was not that contract approved on the 4th of March?

General TAYLOR. The rate of 80 per cent of the rail rates was approved on the 4th of March; yes, sir. The question as to whether or not he has the right to use them on the lower river is another question. Mr. Goltra is stating, as Mr. Brent says, that he is going to use them on the lower river.

Senator JONES of Washington. I understand that he can do it under the contract.

Mr. BRENT. The contract made by the engineers, as General Taylor correctly states, was for operation in the upper river; but under some presentation of facts—probably the fact that during five or six months of the year he could not operate on the upper river on account of ice—he got an alternative provision which is broad enough to give him the right to operate anywhere on the Mississippi and its tributaries.

Senator SPENCER. And that was in the original contract?

Mr. BRENT. That was in the original contract, and that contract states that he may not operate at rates higher than the railroad rates, and that he may not operate at rates lower than the railroad rates without the consent of the Secretary of War, and that consent was given in writing on the last day of Secretary Baker's incumbency; and on the 30th of this month Mr. Goltra proposes to take this fleet and put it in competition with the Government's fleet on the lower river.

Senator JONES of Washington. Can we have copies of those contracts?

General TAYLOR. Certainly.

Mr. BRENT. Now let me state one thing further.

Senator JONES of Washington. Is this supplemental contract that was approved on the 4th of March in the House hearings?

Senator SPENCER. The approval is not here. The original contract is.

Senator JONES of Washington. Can we have a copy of the approval made on the 4th of March, 1921?

General TAYLOR. Certainly.

Senator JONES of Washington. I wish you would furnish that.

Senator WADSWORTH. You stated a moment ago that that competition would be destructive to the Government-owned and operated line. How do your rates to-day on the Mississippi from St. Louis to New Orleans compare with the railroad rates?

Senator REED. Of course you should answer that question Mr. Brent, but I am coming to that. I am going to cover it.

Mr. BRENT. Our rates are 80 per cent of the railroad rates, and when we make joint rates with the railroad the saving of that 80 per cent in cents per hundred pounds is reflected in every through rate to the territory beyond, so that we have the same savings to everybody that lives between Pittsburgh and the Rocky Mountains.

Senator WADSWORTH. May this private citizen charge less than 80 per cent of the railroad rates on the lower Mississippi?

Mr. BRENT. No.

Senator WADSWORTH. Then how is his competition destructive?

Senator JONES of Washington. It divides up your business.

Mr. BRENT. It seems to me it is quite destructive, because one Government operation is in actual competition with another, when the fleets should be combined and work under one operation for the general good of the public.

Senator WADSWORTH. Does he pay rental for his boats?

Mr. BRENT. He pays whatever is left.

Senator WADSWORTH. What do you mean?

Mr. BRENT. I mean this: He first must pay his operating cost; he must then pay insurance; and when everything is paid, whatever is left the Government splits with him.

Senator WADSWORTH. Fifty-fifty?

Mr. BRENT. I do not know the percentage.

General TAYLOR. It is put into a fund which is held in escrow, which can be applied later—at the expiration of his term lease, which is five years—toward the payment of the boats at an appraised options; he has an option of purchase of the boats at an appraised value, and various other options; and that money is to be held and distributed when the final disposition of the fleet is determined upon.

Senator WADSWORTH. We understand, then, that he may not charge a lower rate than the Government-operated line.

General TAYLOR. No, sir.

Senator WADSWORTH. And that whatever net profit he makes in operation he must divide with the Government.

General TAYLOR. Yes, sir. It is held in escrow, to be disposed of later—when, I have forgotten.

Senator WADSWORTH. Do you mean the Government's half is put in escrow?

General TAYLOR. No, sir; the whole of it is put in escrow.

Senator WADSWORTH. Then he gets no net profit as he goes along?

General TAYLOR. No; he gets no net return to him immediately for the operation. Eventually he may use that in applying it toward the purchase of the boats, if he finally decides to purchase.

Senator WADSWORTH. On that statement of facts, I can not make out the destructive competition.

General TAYLOR. Senator, I should like to state another thing. These boats are open barges, built for carrying coal and ore, bulk commodities. They can also be used for carrying oil. The barges of the barge line are principally of the type used for carrying package freight.

Senator REED. Let me get this one thing clear, now. I want, if I can, to pursue this thing and keep it together, because our hearings generally wander all over everywhere, and we get a lot of things scattered through them. Just answering Senator Wadsworth's question, however, of course, one destructive feature of it is that if all of the business is under one management, then that management can plan to take that business and it can plan that there is certain business for it to do; but if there is somebody else running along there that is going to come in and take the goods that you expect to get, of course there is a natural interference to that extent.

I want now to get just one thing further about this line.

Senator LENROOT. I want to ask a question about this contract, first, to get it in my mind, before you leave that subject. Is Mr. Goltra compelled to operate under this contract?

Mr. BRENT. He is compelled to operate as a common carrier.

Senator LENROOT. Are all of the boats under contract?

Mr. BRENT. The entire fleet is under contract with Mr. Goltra. He must operate as a common carrier.

May I say that the Mississippi-Warrior service is encouraging private operation. We are doing everything we can through towing other people's barges and through offering any facilities to a private operator to come in and get ready to take over this service. We do resent the putting of one piece of Government equipment in direct competition with another piece of Government equipment where the two things should be operated as one for the general good, first because we have cargo which should be using these barges, and, second, because it is a perversion of the original purpose of the contract.

The law reads in this way:

Any transportation facilities owned by the United States and included within any contract made by the United States for operation on the Mississippi River above St. Louis, the possession of which reverts to the United States at or before the expiration of such contract, shall be operated by the Secretary of War so as to provide facilities for water carriage on the Mississippi River above St. Louis.

Mr. Goltra does not intend, during the period of his contract, to operate on the upper river. We have tendered to the Secretary of War our organization to operate on the upper river the minute this fleet comes back; and if Mr. Goltra gives it up to-morrow service will start between St. Louis and St. Paul as soon as we can get the things in operation. That is the purpose. Now he perverts the purpose by going into the lower river and putting this fleet into actual competition with the fleet that is already there.

General TAYLOR. That is the reason why I said it was not yet decided as to whether he could operate on the lower river. I think there is some legal question as to whether he can operate on the lower Mississippi River.

Mr. BRENT. We hope so.

Senator SPENCER. General Taylor, does not the contract provide that if the amount Mr. Goltra turns into the Treasury of the United States out of his profit equals plus 4 per cent the cost of the barges, he then gets the title to the barges?

General TAYLOR. I think that is correct, Senator. In other words, he will have paid for them out of the operation.

Senator FLETCHER. Why has he not done something up to this time?

Mr. BRENT. The contract says that he shall take possession of the fleet upon the completion of the first barge or towboat. All of the barges have been completed for 18 months. We have had five of them in our service—in productive service—and those are the only ones except what the engineers have been using for their own purposes. The thing has been postponed from day to day, and the final time is now set by the Secretary of War for the 30th of this month. He must then take it or leave it.

Senator REED. That is the point I wanted to bring out. So that, as a matter of fact, he ought to have begun this operation 18 months ago. He did not begin it. He has had various postponements and various delays, with the result that he has never yet taken over this fleet and begun its operation. The fleet has been lying idle except such boats as the Government has turned over to you, and now he has until the 30th of this month under some kind of an arrangement to say whether or not he is going to take the fleet?

Mr. BRENT. That is true.

Senator REED. In the meantime, have you had any trouble about the barges that belong in this upper Mississippi River line being taken from you from time to time?

Mr. BRENT. Oh, we have had them and we have not had them. We have begun to use them and they have been called back.

Senator REED. Called back for what purpose?

Mr. BRENT. For the purpose of tender. They were to have been tendered to Mr. Goltra on the 1st day of January. We had three of them in use. We had to forego northbound cargo and bring them back empty upstream, at a cost of something like \$5,000, in order to tender them. Before we got them upstream, the date was set back until April 1. We got three of them in operation again, and again they were required for tender. We have been very much embarrassed by an effort to use them, and at the time when we just got going we would have to give them back. That has been an embarrassment. I may express some little exasperation over that as a person who has been charged with the demonstration of the feasibility of this thing; but, gentlemen, I do not think that either Colonel Ashburn or I have the slightest thought that we want to go on as a Government institution on these rivers. We are there by default. There is nobody else there, and it is not on the cards that this man can do anything with his fleet. I am waiting patiently, because at the end of 90 days he must make his first return, and I know that he can

not make his operating expenses. There is not any line on the lower river or any other portion of the Mississippi River than can live without joint rates. He has not a single joint rate. Sixty-five per cent of our business is joint with the railroads.

Senator CARAWAY. Then he is not going to be very destructive to your operation, is he?

Mr. BRENT. No; but in the meantime we lost 16,000 tons of freight this month, which would have brought the Government \$60,000, and would have saved the public about a dollar a ton.

Senator JONES of Washington. That is rather destructive.

Mr. BRENT. That, we think, is unfortunate to an institution that is trying to demonstrate that that river is profitable.

Senator REED. Why did you lose that?

Mr. BRENT. Because it was whale oil coming from the South Pacific to be transported to Procter & Gamble, in Cincinnati, to make soap. We could not get it, the ships were so prompt. We had the barges ready for them when it came and took them downstream to provide transportation for it, and they were taken back in order to tender them to Mr. Goltra. Therefore we lost it.

Senator FLETCHER. There is more business now than you can take care of, you say?

Mr. BRENT. Yes; but it is joint business. There is no business that exists local to the river which will support any line. Our transportation in this country is too greatly integrated to permit any single line to live.

Senator LENROOT. If you have more business than you can take care of, how is this line that you say could not get any joint business going to hurt you?

Mr. BRENT. We can not take care of all the business, but they can not take care of anything.

Senator LENROOT. Then how is it going to hurt you?

Senator WADSWORTH. It is not the competition that you fear, but that it will take part of your profits.

Mr. BRENT. They will go into competition with us and get part of the profitable business, and every transportation line lives by reason of having two-way traffic, and they will destroy this line without doing anything for themselves. We are living and making our way, and on the Mississippi River we are turning something back into the Government's coffers.

Senator WADSWORTH. They will not be able to do that for very long?

Mr. BRENT. No; I think not. I think 90 days will end it.

Senator WADSWORTH. In other words, he will not operate those barges for fun?

Mr. BRENT. Not on your life.

Senator FLETCHER. The real loss to you is that you need the barges?

Mr. BRENT. We need the barges.

Senator FLETCHER. It is not exactly a loss, but if you had the barges you could do more business?

Mr. BRENT. Exactly. Beyond that, there is one purpose for keeping on with this Government line, and that is to demonstrate to private capital that something can be done with it, and if we allow

other people to go in and destroy the revenue part of the line we do not demonstrate anything.

Senator JONES. And the result will be that the Government will have to make further appropriations to go on with it or else go out of business.

Mr. BRENT. Our margins are very narrow, and if a man comes in and skims the cream off of the business the first thing you know we are gone.

Senator FLETCHER. You would not contemplate turning it over to a private concern to operate and giving them a monopoly of the river?

Mr. BRENT. I do not care what private concern goes in and buys it in good faith and operates on the same kind of a contract we do. We have to operate as a railroad.

In order to make our showing we must do it as a railroad does it. This man has nothing of that sort. If he makes money, well and good; if he does not make money, he quits. In the meantime he destroys us.

Senator REED. As far as this committee is concerned, that is a side issue.

Mr. BRENT. I think so.

Senator REED. I want to take the next step in the operation of this line. You have spoken about joint rates. When you started to operate that line did you have any joint rates at all?

Mr. BRENT. None whatever.

Senator REED. Tell the committee briefly what obstacles you have met with in getting joint rates and how far you have progressed along that line.

Mr. BRENT. During the life of the Railroad Administration we set about to get as large a basis of rates as we could while the railroads and waterways were being administered by the same authority, and during that period we were given a fairly comprehensive basis of rates between New Orleans and the upper valley. In other words, we had joint rates between New Orleans and the States of Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, and Missouri, and parts of Arkansas and Tennessee and Kentucky. Those rates, as I have stated, started with a basis of 80 per cent. In other words, the water rate between St. Louis and New Orleans is 80 per cent of the rail rate. That happens to make a difference, for the purpose of illustration, of 30.5 cents in the first-class rate, the boat rate under the all-rail rate.

When we make a rate to Milwaukee, we make the rate to Milwaukee 40.5 cents less than the rail rate New Orleans to Milwaukee; and that is true as to Cleveland, Duluth, Kansas City, or Omaha.

That spread of rates was given us during the Railroad Administration. During the last hours of its life the Railroad Administration set up a division sheet which is the basis on which the revenues under these rates are divided and distributed, and that basis gave the railroads all the best of it. In other words, through certain junctions where the railroads have fair divisions among themselves, it worked fairly well; but through other junctions, where the railroads for their own policies closed the gateways to competing railroads, it has the same effect of closing the gateway to the barge traffic, and, while

there are rates, the divisions are so destructive we have either had to keep out of the business or, if we carried it, we carried it at a loss.

In September, 1920, the service filed a petition before the Interstate Commerce Commission for a revision of those divisions under the authority which the commission has. That proceeding has been heard at length. There is a record of some 2,500 pages of testimony and about 500 exhibits, and it is a very comprehensive presentation of the matter, and it has taken a long time. The matter is now up, or will be argued before the commission on the 15th of May, after which we expect a decision. In the meantime our gateways are closed to all intents and purposes so far as a great deal of the traffic is concerned; for, while the rates are there, we can not operate under them and must ask the public not to give us the business.

That is peculiarly the case on the Warrior River, to the extent that we have not been able to attract traffic, and the Warrior loses very heavily through that fact.

We also, in September, 1921, filed a petition with the commission for an extension of joint rates to give us the equivalent of the basis of the railroads up and down the Mississippi Valley. In other words, we want rates as comprehensive as those on the railroads that serve the same territory. That matter is being heard before the commission in continuation in Chicago this week. It will be some months before we get a decision in that case. These proceedings are necessarily slow. Those proceedings, if indulged in by a private carrier, would result in such a loss while being continued that the line would go out of business before it got results. That is the chief reason for keeping this thing still in the hands of the Government until these matters can be worked out, at least in principle, for this line, so that other lines that come after may follow these precedents.

Senator LENROOT. If you do not get those divisions on the Warrior what do you propose to do with the line on the Warrior?

Mr. BRENT. Let me say that I personally propose to ask some mandatory legislation for the commission to be required to make a fair division. Would you not think it was desirable, when we are compelled to continue under rates where the railroad can take 75 per cent of the revenue for doing 25 per cent of the service, a thing which is the rule and not the exception in the present method of divisions?

Senator LENROOT. Is it your view that if, after this very thorough hearing, the Interstate Commerce Commission does not give you such a division as to make it possible for you to operate, you will ask Congress to compel the Interstate Commerce Commission, who know more about it than we do, to do something?

Mr. BRENT. I think, if waterways are to be continued, if the inland transportation is to be used, that it is reasonable that the country at large should ask a law that in their judgment should be the policy of the commission. Certainly it must. It is not a thing that is unknown. There is not a country in Europe that does not demand and get by legislation or mandate protection for waterways, protection against those interests which are necessarily and always the stronger and who will be the dominant interests and who will wipe out the other interests unless they are compelled—that is all.

Senator LENROOT. Is not the law sufficient now, and is it not the question of fact and the conclusions based upon the facts that must be dealt with?

Mr. BRENT. The law is simply permissive in this respect, and yet we have much mandatory law in the interstate commerce commission law.

Senator FLETCHER. The law you would want would be such a law as would insure the preservation of this means of transportation?

Mr. BRENT. Exactly. It would permit private capital to be so secure that it can go back and use the river—so as to make it possible for private capital to go back.

Senator FLETCHER. Do I understand, Mr. Brent, the railroads are actually antagonizing this means of transportation?

Mr. BRENT. Oh, certainly.

Senator REED. I want to clearly understand you. When it comes to a division of rates the general condition you have had to go against has been that the railroads have taken 75 per cent and left you 25 per cent where the service was equal. That is about an average statement?

Mr. BRENT. No; I do not want to state it that way.

Senator REED. Then state it the right way.

Mr. BRENT. Let me modify it in this way: Through certain gateways, which the railroads distinguish as excepted gateways, the divisions are relatively fair. That is particularly true of the gateway of St. Louis, through which the bulk of the Mississippi River traffic moves. It is absolutely not the fact of the gateway at Memphis, and so far as the Warrior River is concerned there are no gateways and, therefore, no divisions. And that thing is almost entirely true of the Warrior section. It would not be true of the Mississippi, but almost wholly true of the Warrior.

Senator REED. You have had these difficulties, then: First, of an inadequate channel; second, of an inadequacy of boats and equipment to handle your business; and third, an unfair division of rates with the railroads. You have had those things to contend with?

Mr. BRENT. Yes.

Senator REED. One other thing: How about the wharves, etc., or the lack of them, along the river, and what is the condition of their development at the present time?

Mr. BRENT. Well, at the time we went into the stream there were no terminals at all. The Mississippi River had been abandoned for service for 25 years; there had not been a through operation, and there never had been common carriers on the river; we had never known such a thing; and there had not been a boat that had operated, in my recollection, through from New Orleans to St. Louis. When the old steamboats did operate they operated under those old ante bellum conditions where freight was put on a negro's back and carried up the gangplank to the muddy bank and laid down on the muddy bank.

Shortly before we started, St. Louis began the development of modern terminals, and when we got into it we found them partially completed. The city of New Orleans, however, had a very large system of docks over which we could operate at any time, but we had to have a great many expenditures there in order to make them feasible for our service. There was nothing at Memphis, there was nothing at Vicksburg, there was nothing at Cairo.

You understand, we make no landings at local way landings at all, but stop only at points where we interchange freight with the railroads, and those terminals at those interchange points have had to

be developed from nothing, and they are not yet fully in use, and that is one of the limiting conditions surrounding our traffic.

For example, during the last winter season we had barges capable of handling, probably, three times as much grain as we did handle, but the capacity of the grain elevators at New Orleans—the capacity for unloading—was so limited that we frequently had 15 or 20 barges tied up there loaded with grain, on which we had a period of detention of 15 or 20 days per barge; and if we had had proper terminals those barges would have been unloaded and upstream and down again with another load before we got them out of New Orleans. Those things are being gradually improved.

As far as industry is concerned, they have turned their backs on the river. It costs us \$35 a car to get a carload of sugar from the American Refining Co.'s refinery to our barges.

Senator REED. And how far is the haul?

Mr. BRENT. Three miles.

Senator REED. And it costs you \$35 a car?

Mr. BRENT. \$35 a car switching charges, for the reason that the American Sugar Refining Co. imports its raw sugars from Cuba and Porto Rico, and its entire dock space is used for the receiving of those importations of the raw sugar; and then, as it is manufactured, it gets farther and farther away from the river until you come to the loading dock, and it is clear around at the back end of the plant, and in order to get it to their own wharves they have to bring it all the way around their plant.

That is merely typical of the condition all along the river. All industry for years has been encouraged to locate itself anywhere where two lines of railroad would come together and by methods of switching absorptions make an attractive situation, until any point on the prairie around Chicago was just as good as a position on the river or on the lake front. We had that condition to meet all along the Mississippi River.

Senator REED. Is that being remedied?

Mr. BRENT. It could be remedied if the Government would adopt the policy of doing what the railroads do and allow the industries to build docks and pay for them out of the freight that is hauled from the industry. That is something that is universal in railroad practice. The industry provides its facilities, and the railroad pays it back the cost by an allowance of \$3 a car for switching.

Senator REED. That is not an insurmountable difficulty.

Mr. BRENT. No, sir.

Senator REED. But is one that can be improved.

Mr. BRENT. Yes.

Senator REED. I am trying to get your difficulties before the committee.

Mr. BRENT. Yes. Well, it will get better as we go along, but at the present time that is a handicap.

Senator REED. I have tried to cover as nearly as I have in mind the physical difficulties that you have had to meet. Let me ask, first, what classes of freight do you haul? Any special classes of freight, or do you haul all classes of freight?

Mr. BRENT. Every character of freight. The only things we do not publish rates on are live stock and perishable freight; but we carry everything known to commerce and in large quantities.

Senator REED. What is the average ton rate which you have been able to establish?

Mr. BRENT. The average has been falling from year to year in our operation with the inclusion of a greater amount of grain. It was \$4 in 1920 and it went to \$3.20 in 1921.

Senator REED. For hauls of what length?

Mr. BRENT. That was the average of our entire business, Senator, and most of it was for a 1,200-mile haul.

Senator LENROOT. Are you speaking of cost?

Mr. BRENT. I am speaking of our earnings.

Senator REED. I am not asking you about earnings. I am asking you what rates you charge?

Mr. BRENT. That is what I speak of, the earning per ton. That is the average of the earnings per ton.

Senator REED. Very well.

Senator LENROOT. You mean gross earnings?

Mr. BRENT. That is the gross revenue. It amounted on our total tonnage handled last year to \$3.40 a ton.

Senator LENROOT. Is that always 80 per cent of the railroad rates?

Mr. BRENT. No. Let me give it in another way. Let me give it in earnings per ton per mile. In 1921 our earnings per ton mile were 3.86 mills, while the earnings of the railroads throughout the country were 12.75 mills per ton per mile. Now you know what they did in operation.

Senator REED. When you say earnings, you mean the tariffs that were charged the people for hauling the freight?

Mr. BRENT. Exactly; developed on the basis of ton miles.

Senator REED. Give us those figures again per ton mile.

Mr. BRENT. From the best information I can get as to the railroads, last year, 1921, their earnings were 12.75 mills per ton per mile.

Senator REED. For all the railroads in the United States?

Mr. BRENT. For all the first-class roads.

Senator REED. And how much were your earnings?

Mr. BRENT. Three and eighty-six one-hundredths mills per ton per mile.

Senator REED. And yet you charged substantially 80 per cent of the railroad rates?

Mr. BRENT. Yes, sir.

Senator REED. Now will you explain that?

Mr. BRENT. Because of the territory in which our rates are fixed, where the rates are the most depressed rates in the United States.

Senator REED. That is to say, these roads that run up and down the river and that compete with you charge less rates than the average railroad rate in the United States?

Mr. BRENT. These roads up and down the Mississippi Valley have for years depressed their rates between the points along the river so low that had it not been for their ability to violate the fourth section of the Interstate Commerce Act and make high rates to

the interior, they never could have operated. They have done that to keep water competition out.

Senator REED. And that condition still exists?

Mr. BRENT. The rates are being gradually raised, but the increases by comparison are very small.

Senator REED. So when you establish a boat rate on the river at 80 per cent of the railroad rate you mean that you are getting 80 per cent of the lowest railroad rates there are in the United States?

Mr. BRENT. I think that is unquestionably true. I know of no lower rates in the country except those competitive with the Great Lakes, which are very much in the same condition.

Senator REED. Then the result of the water competition, existent or potential, has already and for years been to keep the rates down in that territory where there could be boats put on the river and where you now have put boats on the river?

Mr. BRENT. Yes, sir.

Senator REED. Notwithstanding that fact, you are able to and have hauled at 80 per cent of the railroad rates in that particular part of the United States, and you have been able to operate although you have had an unfair division with the railroads for the joint hauls?

Mr. BRENT. That is true.

Senator REED. And the rate that you now establish for these boat lines is about one-fourth of the average railroad in the United States, is that true?

Mr. BRENT. One-third.

Senator REED. You say that you have made money on the Mississippi River notwithstanding these conditions? Now, I want to know some other conditions under which you are compelled to operate. This fleet was built in war times and at war costs, was it not?

Mr. BRENT. Yes, sir.

Senator REED. And it is charged up at \$13,500,000 in round numbers?

Mr. BRENT. Yes, sir.

Senator REED. As a matter of fact, what could that fleet be reproduced for?

Mr. BRENT. Between \$5,000,000 and \$6,000,000.

Senator REED. So that if that excess cost was shrunk out of that business as it was out of other businesses that were started during the war, as, for instance, the Emergency Fleet Corporation products, you would have a basic cost of about \$6,000,000 instead of \$13,500,000?

Mr. BRENT. That is true for the two services. For the Mississippi something about between \$3,500,000 and \$4,000,000.

Senator REED. All right: \$3,500,000 to \$4,000,000 on the Mississippi River?

Mr. BRENT. Yes, sir.

Senator REED. And how much of the \$13,500,000?

Mr. BRENT. Between \$8,500,000 and \$9,000,000.

Senator REED. To put it plainly, the one on the Mississippi River is charged in at \$8,500,000 to \$9,000,000, but as a matter of fact could be reproduced to-day—

Mr. BRENT (interposing). And better.

Senator REED. And reproduced better for three and one-half million dollars?

Mr. BRENT. Between three and a half and four million.

Senator REED. Very well. Now, under the law that exists, what are you compelled to do with reference to laying aside a depreciation fund?

Mr. BRENT. The Interstate Commerce Commission requires us to set up depreciation on the basis of the book value, and we set it up on the basis of the eight and one-half million dollars on the Mississippi River every month, on the basis of 5 per cent on steel equipment, which is high, and anywhere from 20 to 25 per cent on the wooden equipment, making a resulting charge of anywhere from \$38,000 to \$40,000 a month in our operating costs.

Senator REED. So that you are compelled to set aside out of these earnings, money to pay at the original cost of this investment, although the equipment cost over twice as much as it would cost in normal times?

Mr. BRENT. That is true.

Senator LENROOT. Just a moment on that. You do not do it.

Mr. BRENT. We do do it.

Senator LENROOT. Do I not understand from the hearings that your operating revenue, without consideration of depreciation, was something like \$150,000 on the Mississippi River last year?

Mr. BRENT. We earned our operating expenses and depreciation and more in July, August, December, January, February, March, and will go out the balance of the three months, from the present indications, very much more. In September, October, and November, on account of the sudden drop in the grain rates under the law, the farmer reduction, we did not earn our depreciation. Our grain rate was suddenly cut 4.25 cents per 100 pounds, and we could not reduce our operating costs fast enough to keep within our income, and in those months we lost. The balance of the months we earned not only our operating expenses but depreciation as well.

Senator LENROOT. I just want to get this straight. According to the testimony before the House, the net income—

Mr. BRENT. You are talking about the calendar year.

Senator LENROOT. "The net income of the Mississippi River section for 1921, calendar year, was minus \$223,049.97. Included in this, however, was a depreciation charge of \$376,890.69, which left us with \$153,840.72 more money in pocket than we had expended on the Mississippi."

Mr. BRENT. That is the calendar year. I am taking it by months for the fiscal year not yet finished. The Government's fiscal year begins the 1st day of July.

Senator LENROOT. I would like you to put in the record just exactly what your net revenue and expenses were down to the last date you have them, including the depreciation charge.

Mr. BRENT. I will do that.

Senator FLETCHER. Month by month.

Mr. BRENT. We will gladly put those figures in, Senator. Now let me put it another way: For the nine months from July 1, 1921, to the end of March, 1922, the gross earnings of the Mississippi section were \$1,694,413.37. The gross operating cost, less depreciation—that is, the out-of-pocket cost—was \$1,478,796.80.

We therefore had a revenue for depreciation and other purposes of \$215,616.57.

Based on its present-day worth of three and one-half million dollars and depreciating that fleet at $3\frac{1}{2}$ per cent, which is the customary percentage offshore, in operating we earned $3\frac{1}{2}$ per cent depreciation and had \$100,000 left to pay the Government income on its investment; that is, including the three bad months.

Senator REED. Now, excluding those three bad months where there was a law that came in and directly interfered with your rates.

Mr. BRENT. I could not separate those on the moment, but I can give that very clearly. But do not forget, please, gentlemen, that the public benefit of that thing was an immediate reduction in the cost of carrying grain down to the Gulf, which was reflected back to the very purchase price of the wheat.

Senator REED. You haul for 80 per cent of the railroad rates?

Mr. BRENT. Yes, sir.

Senator REED. How much, therefore, was there of saving to the public on that difference?

Senator FLETCHER. \$1.35 a ton.

Mr. BRENT. We handled 443,267 tons in the fiscal year 1921, on which the freight revenue, if it had been paid at the railroad rate, would have been \$601,648.63 greater than that paid the barge line. So that the actual saving on every ton of freight on the average carried that year was \$1.34 per ton.

Senator REED. That is the saving on the freight you actually carried?

Mr. BRENT. Yes, sir.

Senator REED. But what was the saving to that territory on the general reduction of railroad rates due to water competition?

Mr. BRENT. Oh, that is a vast amount that I could not even approximate—a very great amount.

Senator LENROOT. Let me ask you there, was there a reduction of railroad rates based on the operation of your line?

Mr. BRENT. Oh, no.

Senator REED. No; I was speaking, Senator, of the reduction he has already spoken of that is due to water competition actual and potential.

Senator LENROOT. And I am now dividing it. He says there was no reduction on account of the operation of that line. That differential existed before?

Mr. BRENT. Yes; caused by potential competition, and has been there for 20 years.

Senator REED. And, of course, would be wiped out if we abandoned the rivers as a competitive agency for carrying freights.

Mr. BRENT. Oh, unquestionably.

Senator FLETCHER. What was that reduction on grain that you speak of?

Mr. BRENT. Three cents a bushel.

Senator FLETCHER. From St. Louis?

Mr. BRENT. From St. Louis to New Orleans.

Senator LENROOT. Was that the 10 per cent reduction on agricultural products?

Mr. BRENT. Pardon me; I mean our reduction saved the shipper 3 cents under railroad rates. The reduction was 5 cents by the railroad and 4.4 cents in our rates.

Senator REED. But your rates were still lower?

Mr. BRENT. Lower by 3 cents a bushel than the railroad rates.

Senator REED. So that every bushel that has been hauled by the barge line has saved the farmer or somebody how much a bushel?

Mr. BRENT. Three cents, which has been directly reflected, as we know, on the market price of grain on the St. Louis market. When our barges were available and the buyers were in the market to bid for barge-line delivery the price went up 3 cents per bushel.

Senator HARRIS. \$462,000 of the \$1,145,000 has been on wheat?

Mr. BRENT. Yes.

Senator HARRIS. And about \$250,000 each on corn and cotton?

Mr. BRENT. Yes.

Senator REED. Now, what is the additional sum of money which you need here, and why do you need it?

Senator LENROOT. Before you go to that I would like to ask him a little more about the Warrior River.

Senator REED. Certainly.

Senator LENROOT. I would like to get your views about the Warrior, going through it as you have on the Mississippi?

Mr. BRENT. Going through what, Senator?

Senator LENROOT. The earning and operating expenses, just as you have on the Mississippi?

Mr. BRENT. The Warrior is an incomplete proposition.

Senator LENROOT. I want the figures.

Mr. BRENT. I will give you the figures. We handled in the year 1919 on the Warrior 122,326 tons; in 1920, 97,783 tons; and in 1921, 226,283 tons.

Senator SPENCER. That is what you carried?

Mr. BRENT. Yes. Now, the revenue per ton in 1919 was \$1.76; in 1920, \$1.87; in 1921, \$2.05. The cost per ton in 1919—without depreciation, the out-of-pocket cost—was \$2.94; in 1920, \$3.66; in 1921, \$3.91.

Senator WADSWORTH. The cost per ton has gone up?

Mr. BRENT. We have not yet gotten to the point there where we can turn the proposition as it should be turned so that the more traffic the less cost. Unfortunately, as yet, we are still in the position of where on added tonnage we add cost, and that is a very discouraging thing. In the first place, we did not get our 8-foot channel until last fall and we had to operate on a 6-foot channel, which is unprofitable.

Senator SPENCER. Did not get your eight-foot channel where?

Mr. BRENT. On the Warrior River. It is not complete yet. The lock pool has to be dredged continuously. There is not any available entrance yet into the harbor of New Orleans for our barges.

Let me say that the Warrior is a stream of which the channel is partially maintained by locks and dams. There are 17 locks and those locks are of dimensions of 50 by 280 feet, as I recall it. Our only means of entrance into New Orleans Harbor is by way of what is known as Lake Borgne Canal, which is leased by this service. The lock there is only 55 feet wide by about 100 feet long. The limitations of that lock were known to be such that a barge built to navigate through it would be unprofitable. Therefore, the barges were

built so as to take full advantage of the Warrior River Locks. For this reason the city of New Orleans, or the State of Louisiana, is building a navigation canal which reaches from the Mississippi into this same waterways system, which takes us across Mississippi Sound into the Mississippi, and that was to be completed two years ago by the statement of the designers, and it is not yet completed. When it is completed, the lock being built in New Orleans Harbor is the size of the Panama Canal Lock and will naturally give us ample entrance into the harbor; but in the meantime every particle of freight we move in both directions has to be transferred at a point called Violet 14 miles below New Orleans. Every boat of coal, every boat of steel, and every boat of merchandise which we take up-stream must be lightered, and the cost of that has been as high as \$1.80 before it ever got out of the town.

Now, those are hampering conditions which have no relation whatever to a reasonable operation, but they are things we are still up against and there is not any demonstration of the value of the stream possible until we get those things remedied.

Senator WADSWORTH. When do you expect to have that channel completed?

Mr. BRENT. The first of September this year is the time they state, and I certainly hope it will be so, because then our lease runs out for this canal, and if we can get the new one we will not have to re-lease the old one, but otherwise we will.

Senator REED. You think by the first of September these conditions will be remedied?

Mr. BRENT. As far as the entrance is concerned.

Senator REED. When that is done will that enable you to operate at a less cost; and if so, how much less?

Mr. BRENT. As far as the element is concerned; yes, it should immediately reduce our cost from what has been anywhere from \$1 to \$1.80 a ton down to our average cost in New Orleans Harbor of 40 cents a ton.

Senator REED. Would that enable you to get out even, then?

Mr. BRENT. I do not think it would. But there is another thing. We have no upstream divisions of rates. We have rates galore, we have sugar rates as far over as Atlanta and Chattanooga, and that whole territory in the southeast where we should be carrying a great deal of sugar, and every time we are tendered any business we find the divisions so unfavorable that it makes it impossible.

Senator REED. Your statement probably was not very clear. When you get this sugar the railroads demand so much out of the joint rate that it is unfair to you and leaves you to operate at a loss?

Mr. BRENT. Precisely. The refinery offers us sugar for a point in Alabama and we measure the rate and we measure our division, and we find if we take it we would be worse off than if we did not handle it, and, therefore, we can not take it and we do not get the business. First, it is the absence of a balanced tonnage; and, second, it is the absence of any high-class tonnage to neutralize the poor returns from the heavy tonnage of coal and steel, on which the rates are very low.

Senator REED. Is this the territory where you say the railroads in the case of an equal length of haul take 75 per cent of the revenue?

Mr. BRENT. It is much worse than that.

Senator HARRIS. Give us a concrete example.

Mr. BRENT. The railroads for a haul of 25 per cent of the distance take anywhere from 75 to 90 per cent of the rates in many cases. These are not isolated instances, but they are the rule. We have produced these facts before the Interstate Commerce Commission and they are all in evidence.

Senator SPENCER. To correct these facts, your case before the Interstate Commerce Commission for the readjustment of rail and water rates in this section is pending?

Mr. BRENT. Yes.

Senator LENROOT. Are you taking any of that business?

Mr. BRENT. We are picking the points. Of course, we have an obligation to carry traffic if it is offered us. If the American Sugar Refining Co. to-morrow tenders the property to us with a bill of lading we have got to carry it.

Senator WADSWORTH. Because you are a common carrier?

Mr. BRENT. Because we are a common carrier. The rates are there and they are filed with the Interstate Commerce Commission, and we have an obligation to transport the traffic that is given us. Some of them tender us freight that costs us money to handle. It was not so long ago that we got 500 hogsheads of tobacco on a through bill of lading from Clarksville, Tenn., delivered to us by the Louisville & Nashville Railroad at Memphis to be carried to New Orleans for export, on a through rate which was established under authority of the Railroad Administration and is still in effect under the law, and the through rate from Clarksville to New Orleans was less than the Louisville & Nashville local rate from Clarksville to Memphis.

Senator REED. What is the difference in the length of haul?

Mr. BRENT. From Clarksville to Memphis is about 150 miles, and the haul by way of this route is something like 900 miles.

Senator REED. That is, the water haul was 900 miles?

Mr. BRENT. No; the water haul was 750 miles, and the total haul 900 miles by reason of the 150 miles rail haul; and the Railroad Administration, under this division sheet I speak of, justified the railroad in charging their local rate out of a through rate like that. Those are the inconsistencies we have to contend with.

Senator LENROOT. To what extent is your business composed of business of that kind?

Mr. BRENT. Of that unprofitable business?

Senator LENROOT. Yes.

Mr. BRENT. Very little of it, because we do not take it. Wherever it is possible we eschew that business—avoid it. But that which we get and which we take—we take it wherever there is a margin that will leave us anything, but it is by no means representative of what would be a reasonable, relative margin.

Senator LENROOT. I notice your statement for the calendar year 1921 on the Warrior River shows you carried a total tonnage of 234,238 tons.

Total expense	\$1,017,061
Total revenue	464,427
Leaving a deficit of	552,633
Made up as follows:	
Depreciation of	133,429
Cash deficit	419,214

Mr. BRENT. That is true.

Senator LENROOT. Unless you get relief from the Interstate Commerce Commission, what possibility is there on the Warrior River of operating successfully?

Mr. BRENT. Very little.

Senator LENROOT. Then, in your opinion, if the Interstate Commerce Commission did not grant you relief, ought this not to be abandoned?

Mr. BRENT. No, sir; I do not think so.

Senator LENROOT. Do you think the Government ought to continue to operate the line here at an expense to run of \$2 per ton for freight?

Mr. BRENT. I think it should, Senator, until such time as we can get a legal situation which will permit the river to be operated by private capital.

Senator LENROOT. It can not be operated by private capital.

Mr. BRENT. It can be, because the conditions of which I speak are so unbearable that I do not believe the commission will dare to think of permitting it to continue.

Senator LENROOT. My question was on the assumption——

Mr. BRENT (interposing). I appreciate that, but the thing cries to Heaven and ought to be changed.

Senator LENROOT. When it is changed it might be time to go back to this proposition, but for the Government to stand a loss of this kind seems to me unthinkable.

Mr. BRENT. That is a debatable point.

Senator REED. When these locks are completed and the new entrance to New Orleans is available next fall, that item of your expenses is removed, but you still could not operate, as I understand you, at a profit on the Warrior River; is that right?

Mr. BRENT. I am quite convinced that is true, because we must have a balanced traffic. We must have some high-grade traffic, as well as coal and steel, or we can not operate profitably anywhere on those rivers.

Senator REED. Very well, but your losses would be greatly reduced.

Mr. BRENT. They will.

Senator REED. And that is a thing that is almost certain to come in September.

Mr. BRENT. I think so.

Senator REED. If in addition to that the Interstate Commerce Commission makes orders allowing a fair division of rates, then you can operate at a profit on that river?

Mr. BRENT. I firmly believe we can turn this loss into a profit by building up our revenue and reducing our expenses.

Senator FLETCHER. What are the advantages and possibilities of that route, Mr. Brent? What is the need for it?

Mr. BRENT. The needs are very great. May I just state briefly what my idea is as to the commercial advantage or the public advantages, and particularly the public advantages that I have in mind in all these waterways?

Senator FLETCHER. Yes.

Mr. BRENT. In the years 1900 on to now, our population has increased 39 per cent; the tons of freight carried have increased 168 per cent; the railroad mileage has increased but 33 per cent; the

freight cars have increased but 77 per cent, and the motive power—that is, the engines, has increased but 71 per cent.

Now, you have not enough rail transportation. We have got a cheaper method of transportation. The public has some rights to have the advantages of these things. That is my view, particularly when I consider it from this standpoint: the thing that we are trying to do is the coordination. The Mississippi-Warrior service competes with just six railroads in the United States. It is a valuable connection of every railroad in the United States, including the six with which it competes. The biggest interchange tonnage we have with any railroad in the United States is with the Illinois Central Railroad, the one with which we most directly compete. I say this thing should be continued until we can coordinate these things to a basis on which the waterways can be reasonably used and on which private capital can properly invest itself.

Senator FLETCHER. Where do you connect with the Illinois Central?

Mr. BRENT. At Cairo and St. Louis, at Memphis and at Vicksburg.

Senator FLETCHER. You take freight from the Warrior around to the Mississippi?

Mr. BRENT. No; pick up freight at New Orleans and carry it to Cairo and give it to the railroads.

Senator FLETCHER. I am speaking of the Warrior service.

Mr. BRENT. We do not compete with the Illinois Central on the Warrior at all.

Senator FLETCHER. With what railroads do you compete?

Mr. BRENT. The Southern, Louisville & Nashville, Mobile & Ohio; also we are very valuable connections of every one of them.

Senator FLETCHER. That commerce that you are taking out of there is most of it bulky stuff, is it?

Mr. BRENT. South bound largely coal and some cotton. If we could get into the cotton trade more directly and as we get into it there will be a more valuable tonnage involved.

Senator REED. I want to take up one other thought, and then come to the question of the money you need to carry you through. Is there an immense tonnage along the Ohio River and its tributaries?

Mr. BRENT. Very great.

Senator REED. Can you estimate the amount of that tonnage in the rough?

Mr. BRENT. Senator, I have not the slightest means of estimating. When I consider the immense steel and other traffic of those large industrial districts tributary to the Ohio River, I do not know how to describe it. It is enormous.

Senator REED. If that project was completed would it double, quadruple, or multiply—

Mr. BRENT (interposing). Manyfold, Senator.

Senator REED. It would multiply manyfold the business on the Mississippi River, would it?

Mr. BRENT. Very much.

Senator REED. Would it tend to cut down the cost of operations because of the volume of business?

Mr. BRENT. It would. We are now handling in the barges of private concerns, steel products, pipe, steel, wire, and nails, from Pittsburgh district, picking it up at Cairo and delivering it at Vicksburg, New Orleans and these other points for the steel company. We are doing that as a towing carrier, and doing it profitably, and it is reducing our cost and giving them a better outlet.

Senator REED. The Missouri River. Is there a great deal of potential traffic along that river?

Mr. BRENT. Very great: for this reason, that every bit of traffic which moves generally east and west moves on rates which begin at the Mississippi River and end at the Missouri River, or begin at the Missouri River and end at the Mississippi, so in that stretch between St. Louis and Kansas City the river becomes a potential carrier, a possible carrier, in competition with the railroads on every pound of freight, even through freight, which moves from the territory in the East to the territory in the West all the way to the Rocky Mountains.

Senator REED. If the Missouri River was improved so that both lines could be put on it, that would increase the traffic on the Mississippi River, and it would decrease the cost of freights to all that country?

Mr. BRENT. Very much.

Senator WORD. And in a word, that reaches into the great center of the United States and embraces not only the States that touch these rivers, but adjacent territory; does it not?

Mr. BRENT. Every bit of traffic that moves between the Atlantic seaboard and the Sierra Nevada Mountains and crosses the Mississippi and Missouri Rivers, feels the regulating influence of that piece of river?

Senator REED. Then, the situation is this, that the upper Mississippi River is not properly improved and when improved, your costs of hauling will be greatly decreased; the entire traffic of the Ohio River is still shut out, but can be let into the Mississippi River when there are three, four, or five more dams completed.

Mr. BRENT. True.

Senator REED. And that would decrease the cost?

Mr. BRENT. Yes.

Senator REED. The Missouri River with its traffic would also reduce the cost on the Mississippi if the Missouri River was improved and the Warrior River's costs will be depreciated as you have already stated by proper entrance into New Orleans, which is about completed.

Mr. BRENT. Yes.

Senator REED. So that the figures you give us here to-day for costs are not based upon a perfected scheme, but upon a scheme only partially developed?

Mr. BRENT. Only partially developed.

Senator REED. What is the necessity for additional moneys which you say you must have or ought to have in order to carry on your work?

Senator FLETCHER. Before you go to that, you have not asked about the equipment on the Warrior River yet.

Senator REED. Very well.

Mr. BRENT. The equipment on the Warrior River consists of a lot of war-time stuff, some 50 wood and coal barges, with three old tow boats, two of which are out of commission, and it consists of two new tunnel-stern tow boats, four steel self-propelled barges, a fleet primarily designed to carry coal and steel—no, not even steel, but primarily designed to carry coal and not very well adapted to other commodities.

Senator FLETCHER. The fleet then really is not up to standard as far as general commerce and traffic are concerned.

Mr. BRENT. I have no hesitancy in calling the fleet a misfit. I do not mean in designing and planning, but it is not by any manner of means the character of fleet which we would build to-day.

Senator FLETCHER. Does not that bear upon the question of the excessive cost?

Mr. BRENT. It is a very difficult thing to operate; it is not right. I might say in operation it creaks at some point most everywhere you touch it. There is something wrong.

Senator FLETCHER. If that was remedied, your losses would be less. would they not?

Mr. BRENT. Yes; as we revise some of these difficulties—for instance, strange as it may seem, we should not be burning coal on the Warrior River. Those boats should be oil-burning boats, and you could save money if you had the money to revise the system from coal to oil burning.

In the second place we have only one or two points where we come in touch with the fleet in its operation. It is a wild country, no cities on the banks of the river, not even hamlets, no telephone service. The boats go out and get lost. All of our boats on the Mississippi River are operated by wireless, and we have one central station at Memphis and are in constant touch with all the boats. Each boat must report every three hours. We should have wireless on the Warrior, but we have not the money to put it in. Those are things which could very greatly mitigate these losses if we had the money to make certain reasonable revisions.

Senator LENROOT. You answered Senator Reed with reference to decreased costs with the completion of the Ohio, the Missouri, and upper Mississippi River improvements. What decreased costs did you have reference to in those answers?

Mr. BRENT. Decreased cost of operation.

Senator LENROOT. Of your plant?

Mr. BRENT. Of any plant.

Senator LENROOT. A saving to the public?

Mr. BRENT. A saving to the public by navigation.

Senator FLETCHER. It did not affect your plant?

Mr. BRENT. No; we do not go on those rivers at all. We believe in a rough way, Senator, that very much the same economy could be secured on the Ohio River that we secure on the lower Mississippi River and relative economies on the other rivers.

Senator HARRIS. What is the relative volume of traffic northbound and southbound on the Warrior River, and what do you carry northbound?

Mr. BRENT. On the Warrior River the northbound revenues are only about 5 per cent of the southbound revenues. We have nothing

but merchandise. There is a vast amount of sugar, rice, and imports, freight that naturally flows into New Orleans and Mobile for distribution from New Orleans and Mobile, but we can not touch it on these decisions. We do not get it, but the tonnage is there to serve the public, and I believe it would earn us a fair return if we could get it on reasonable divisions.

Senator HARRIS. You think you could get the business?

Mr. BRENT. We know we could get the business. It is constantly pressed on us to take. It is there, but we just can not take it. I do not know that you were here, Senator, at the time I explained that during the last month we have been compelled on the Mississippi River to bring empty barges down in order to handle our upstream tonnage. That same thing would daily be true on the Warrior in a very short time if we could get in a position to handle it right.

Senator REED. I have a sheet here that was handed me that I think is more recent than those figures you put in the record. Is that the Mississippi or the Warrior?

Mr. BRENT. These are the February and March earnings. I touched on them.

Senator LENROOT. Which river is that?

Mr. BRENT. The Mississippi. In February, our total revenue was \$183,000; our out-of-pocket cost \$139,000; our depreciation \$42,000. and profit above operation and depreciation \$2,000.

In March our total revenues were \$230,000; our out-of-pocket expense \$178,000; our depreciation \$42,000, and our profit \$10,000.

Senator LENROOT. I might ask you why the Interstate Commerce Commission will not permit you to reduce your capital cost or value so that a proper depreciation charge will be reflected?

Mr. BRENT. I do not know, sir.

Colonel ASHBURN. I do not know. I had it up with them twice, and I have again taken the matter up in the last three weeks asking to have that reduced.

The Association of Water Line Accountants want to take off 3½ per cent a year for steel barges and 5 per cent for wooden barges, and I have also asked them to let me make the depreciation on that basis. The main objection they offered to it the first time I presented it was that we would have to reduce our capital stock and as soon as you reduce your capital stock from \$8,500,000 to \$4,000,000 you immediately get a loss of \$4,500,000.

Mr. BRENT. Well, we have lost it in war costs. Our barges on the Mississippi River cost \$125,000 and I can buy those barges to-day for \$45,000. Those are facts.

Senator WADSWORTH. As far as this pending bill is concerned, the thing you want to emphasize is the estimate of \$300,000 for an emergency fund which you can put in your treasury to stand against an unlooked-for deficit.

Mr. BRENT. Senator, any business institution ought to have a working capital. That merely represents the deficit which has already been earned, and if we quit to-morrow we would have to pay up our back bills, and would have to have that money and use it. We ought to have it in the treasury so we can use it from day to day.

Senator WADSWORTH. We understand from the former hearing the law prohibits you incurring debts.

Mr. BRENT. And it also directs the Secretary of War to continue the operation.

Senator LENROOT. You now have \$100,000 in your revolving fund!

Mr. BRENT. Yes.

Senator LENROOT. And that revolving fund can be utilized for the payment of any of these deficits?

Mr. BRENT. Yes. Let me illustrate—

Senator LENROOT (interposing). Let me get the facts first.

Mr. BRENT. Certainly.

Senator LENROOT. To what extent during the next year will that revolving fund be increased from sources other than profits?

Mr. BRENT. Colonel Ashburn will have to answer that.

Colonel ASHBURN. There is a note due on the 1st of July of \$75,000 and also another note due on the 1st day of January next year of \$75,000, and the notes then begin to run, on the New York section, about \$12,000 a month right along.

Senator LENROOT. Beginning when?

Colonel ASHBURN. The 1st of January, 1923. We will get \$75,000, as I say, on the first of the fiscal year and \$75,000 the 1st of next January, then the notes begin to run in February. Then, in addition to that, there are notes that begin to run on the intercoastal section, about \$4,000 a month.

Senator WADSWORTH. These are the proceeds of sales?

Colonel ASHBURN. Yes.

Senator LENROOT. What will that aggregate during the fiscal year 1923?

Colonel ASHBURN. About \$225,000, and that will be available to pay these losses, because the law provides—

Senator LENROOT (interposing). I understand that. Now, what working capital do you have to have?

Mr. BRENT. Well, Senator, you know we are like a railroad carrier. As I have told you, between 65 and 75 per cent—it fluctuates from month to month—of our traffic is joint. The traffic which goes north-bound is all paid at destination and settled into the railroad treasuries and must be returned to us through their accounting departments, through what is known as interline settlements. We must frequently claim prepay freight from the railroads in the same way. It is always 60 days and sometimes 90 days before we get that money. In the meantime, we have expended all the money to handle that freight. Our uncollected balance from the railroads runs anywhere from \$250,000 to \$300,000 a month. It is a working fund in itself. It keeps growing and doubling and turning over, but it is always in arrears.

Senator LENROOT. Is this \$100,000 now in the revolving fund used as working capital?

Mr. BRENT. Anything that is transmitted to us at New Orleans is used as working capital, whatever source it comes from.

Colonel ASHBURN. I have been keeping the \$100,000 as a reserve.

Senator LENROOT. That is what I am getting at. That would be available for losses and the \$225,000 would be available for losses, making \$325,000 available during the fiscal year for losses outside of this appropriation you ask for; is that correct?

Mr. BRENT. It would seem so.

Colonel ASHBURN. Yes; but the first money that comes in, comes in the 1st of July; then we would have the \$75,000 and \$100,000 only during the six months. There would be six months we would not have a working fund of \$75,000. Now, it would not take any unusual accident, such as a wreck on the Mississippi River or a strike, as I told you before, to take that \$175,000 out and leave us with a deficit. I do not think we will even have to use the \$300,000 we are asking.

Senator LENROOT. Of course, in that unusual condition you could get a deficiency. But what do you estimate for the next fiscal year with the combined operation your losses would be?

Mr. BRENT. I would want to work that over with our auditor to give you a very clear statement of what I think to be a fact; but may I make this appeal: Do not leave us entirely without capital.

Senator LENROOT. That is why I am asking these questions.

Mr. BRENT. These are merely for operating results, Senator. When we are called upon to take on an increase in tonnage, which has frequently amounted to 20,000 or 30,000 tons a month, if it had not been for our ability to go to the War Department and grab off some surplus material we would have been at an absolute loss what to do. You can not take on all this tonnage without buying more trucks to provide yourself with increased facilities as business grows. You can not grow from 100,000 to 700,000 tons a year with capital expenditure. Those things can not be charged to operation.

Senator LENROOT. That is why I am asking the questions. I think you have made a showing on the Mississippi that you would be fully warranted in that course, but I do not think you have made a showing on the Warrior River for going into any capital expenditures.

Mr. BRENT. We must go on doing things until we can reduce our costs. These two measures would reduce costs tremendously.

Senator LENROOT. You misunderstood me. I meant on the Warrior.

Mr. BRENT. That would have to be charged to capital. We could not take that out of operating costs. We would have to come to you before or afterwards, and we should at least know we were warranted by the knowledge that we had discussed the matter with you in taking on these expenditures because they are capital expenditures and could not be taken out of the revolving fund for operation. They are the kind of things railroads tide over by short-term notes, and go to the bank and borrow money, and float securities afterwards for it. We can not float securities or make short-time notes, and we must ask you for permission to expend a small amount of capital to reduce the cost.

Senator FLETCHER. In an enterprise the size of this, Mr. Brent, it is entirely possible to suffer a loss of \$100,000 and probably make that up in the next month or the next two months, is it not?

Mr. BRENT. Oh, absolutely.

Senator FLETCHER. But you can lose \$100,000 in a month. I am told the Southern Railroad Co. itself often finds itself short a million dollars a month in its operation and makes it up later on in other ways. But that is liable to happen with traffic like this.

Mr. BRENT. There is a very great fluctuation.

Senator FLETCHER. And if you suffered that loss and had no way of making it good you might have to go out of business.

Mr. BRENT. There are very great fluctuations.

Senator REED. Will the committee indulge me for about five minutes on this matter?

Mr. Brent, I thought perhaps you were through with that, but the committee may want to ask some more questions.

Mr. BRENT. All right, Senator.

Senator REED. I want to get before this committee the picture presented to my mind of the whole proposition. I want to get it before the committee, because we know the utter futility of trying to present these questions to the Senate and get the attention of the Senate. That is not said in any criticism at all, but when we get appropriation bills up it is so hard for the members to attend and give them close attention, so we have to trust very largely to committees.

Now, fundamentally this is true, that where there is water competition, actual or potential, the railroad rates have been very much lessened; they have been elsewhere in the country. So that along this Mississippi Valley the benefit of this water competition has been practically realized. If the rate that exists on the average throughout the country existed in the Mississippi and Warrior Valleys, these boat lines could run and charge 80 per cent of the railroad rate and make all kinds of money.

The Mississippi Valley—and I am speaking of it in its broadest sense—is that vast section of the country that constitutes the interior and all the industries of which are in competition with the Atlantic and the Pacific coasts. We connected those coasts and connected that traffic by the Panama Canal, and the Panama Canal simply multiplied many times over the advantages of the eastern and western coasts. If we do not make a corresponding improvement in the interior, the result will be that the coast part of the country is going to be built up by Government aid through the Panama Canal and by railroad rates based upon the water rates, and the interior of the country is going to suffer to an absolutely alarming extent. The movement, as I understand it, already is on looking toward a modification of these rates, and unless these rivers are improved, we can reasonably anticipate that the rates will be raised through the great Mississippi Valley within a reasonable length of time, because the people and Congress will not forever stand against the maintenance of a water rate competition if there is in fact no actual competition upon the waters.

The next proposition is this: If the railroads of this country do not within the next 10 years substantially double their capacity, the country at times of peak load is going to suffer tremendously. That has already been true. I know of men in my State who were bankrupted because they could not get freight cars to haul their products to the market at the right time and were obliged to hold them 60 or 90 days, and they suffered ruin on account of it. There are two broad propositions that we can not get away from. There is a third one, and that is that it is now demonstrated that under the most adverse circumstances business can be transacted upon the Mississippi at 80 per cent of the railroad costs and thus a tremendous saving made to the people who have to ship, and to everybody.

I do not believe there is a single business in the United States, started under the conditions that are here apparent, that has made its

way and made anything like the showing that we have made here. To begin with, no great transportation business expects to make money from the start. A railroad does not make money when it starts. And this business had to be built from the ground and built in the face of a competition that had been established for 50 years.

In the next place, we started to build this up in the worst time possible to imagine—during the war—when wages were excessively high, when the primary cost of the plant was double and more than double what it ought to be, when the railroads could not be expected to fall in and cooperate under the pressure they were then sustaining, as they might have in ordinary times, with insufficient capital and with an unfair division of rates, with wharves not completed—with all those conditions to confront. There is a further fact that I want to urge on this committee with all the force of which I am capable. The figures have not been given, but I have seen estimates, and it is estimated that there is more freight originating upon the Ohio River and its navigable tributaries than could be hauled by three or four great railroad lines.

This plan is not to be measured by a test applied to a little part of the plan working, but it must be considered as we would consider any business enterprise, as a developed and completed enterprise. Let those dams be finished so that that freight can get out and so that this boat line, or other boat lines can take their barges and haul them up and down that stream; and let the Missouri River be completed, turning in the vast traffic from Kansas City and all the towns and cities along that stream, and then you will have a situation that you can consider like a business enterprise would expect to consider a great project—the ultimate object it was working to. For God's sake, do not let us call this thing off. It means more to the farmers and the cities and the Central West, in my judgment, that anything that has been suggested in the way of benefit or aid to farmers or aid to enterprise. If we can put these rivers in shape so that we can take advantage of the natural economy of water transportation, you then have something that gets this grain and these products to the market.

Think of operating a boat line from St. Louis to New Orleans where you have to break your fleet up at Cairo and pick up two or three little boats at a time! How could any railroad operate that way; how could any business operate that way? We are talking about doing something for the country here. If Congress was to vote \$500,000,000 to improve the Warrior, the Mississippi, the Ohio, the Missouri, and other great streams so that this project could be a completed thing, it would be the best money this Government ever spent. We could take \$100,000,000 and give it to Europe, and we do not stop to think about it. I am not complaining that we have done it, because everyone wants to help the starving wherever they are, but we ought to help our people out here in this great central part of the country, and when we help them we will help the rest of the country, because they will get their grains and products of the West cheaper, and the West gets all that is produced in the East and other parts of the country cheaper, and I hope that this committee will recognize this situation.

The people of our part of the country—I do not mean in Missouri alone; I mean in that great Mississippi Valley and all those States

that are concerned in this same problem—are waking up to this proposition, and public opinion will sustain a reasonable assistance. Forty-seven million dollars is a ridiculous sum to appropriate. We ought to take hold of this project in a proper way.

Fifteen or sixteen years ago, and perhaps longer than that, they started to improve the Mississippi River. They were going to expend \$20,000,000. They have piddled along with that thing, dribbled it out, and have not gotten the benefit of the money; and they have expended, I think, about \$8,000,000 up to this day. That money lies there. It is useless until the project is completed.

They built at Kansas City by private enterprise a great wharf: they built a line of boats and put it on that river, and it had sand bars there to operate over, and notwithstanding that they got to a point where they were nearly making their way when the Government forced them to turn over their boats during the war for this Mississippi River service. Now, we want some relief, we want it badly. we come here and ask this committee to give it to us, and we think that the committee can be sustained on the floor if it does it. And I want to say now that if I am here and have anything to do with it, I am going to insist that the next appropriation bill shall contain an appropriation for these rivers that will get results.

This showing that is made here to-day is under the circumstances an absolutely marvelous showing; and, I repeat, there is not a private enterprise in the country that would expect to make money under these circumstances. They would expect to sustain losses until they had completed their enterprise and had it in a condition where it could be operated economically. Now, I am not going to take your time, but I want to say that much to you.

Senator HARRIS. Mr. Brent, I want to ask a question about the Warrior River. Until the Interstate Commerce Commission decides that question, is there any way for you to make a saving by using those boats on the Mississippi River? You say you can not supply the demand for the tonnage now.

Mr. BRENT. In the first place, Senator, the operation can not be stopped except by an amendment to the law. The law is mandatory. The operation must be continued. Any operation commenced by the President during Federal control on these rivers can not be stopped without the law is changed. In the second place, the equipment is not particularly well adapted for the Mississippi River. In the third place, there are material obligations to continue to bring bunker coal into the harbors of New Orleans and Mobile by water. We could not divest ourselves of those obligations suddenly without great loss to those using the line.

Senator HARRIS. Suppose Congress did not appropriate money to continue this operation on the Warrior River, how much loss would there be on those boats and barges for a year while the matter was being straightened out?

Mr. BRENT. I can not tell you, but immediately upon my return to New Orleans I will take the matter up with our auditor and figure out as nearly as we can what will be the earnings and the losses, or the net earnings, as the case may be, and give the facts to you.

Colonel ASHBURN. I have here the average losses on the Warrior for 1921.

The average per month loss for 1921 was \$32,063.33; in January, 1921, the loss was \$29,709.62; in December, 1921, it has decreased to \$20,516.80; and in January, 1922, the money out of pocket was \$15,402.93.

So the loss on the Warrior has been cut in two in the last year.

Senator HARRIS. What were those last figures?

Colonel ASHBURN. The average out-of-pocket loss. The depreciation was: Average per month for 1921, \$11,151.03; for the month of January, 1921, \$10,122.80; December, 1921, \$17,231.94; January, 1922, \$15,581.47.

Senator FLETCHER. I think that proves you ought to continue.

Mr. BRENT. It is getting better somewhat.

Colonel ASHBURN. It is getting better, unquestionably.

Senator WADSWORTH. Mr. Brent, what is your position?

Mr. BRENT. Federal manager.

Senator WADSWORTH. Federal manager of these lines?

Mr. BRENT. Yes, sir.

Mr. REED. May I put in here a part of this report?

Senator WADSWORTH. This has to do with the existing project?

Mr. BRENT. Yes, sir. General Taylor called attention to it—part of the report which deals with the section between Cairo and St. Louis, page 1201 of the report of the Engineers for 1921.

Senator SPENCER. That is not in the House hearing, is it?

General TAYLOR. No, sir.

Senator REED (reading):

Attention is invited to the fact heretofore stated and often reiterated, that the existing regulation works can not be maintained with the meager allotments made therefor in recent years. The losses shown, 1911 to 1921, under "Condition at end of fiscal year," are serious and amount in value of replacement at present prices to nearly \$2,000,000; as a result, the river at several localities is again becoming excessively wide—a mile or more—and unless necessary sums for needed restorations and channel corrections are made available, radical increase in the purely temporary dredging work, with attendant increase in plant and operating expenses, must be expected and provided for. Also, many insistent complaints are being received from riparian owners, who at one time felt fairly secure behind the regulation works confining the river within certain limits and in such reliance have made valuable improvements on their properties; these owners naturally feel that the Government, having undertaken to secure the river banks, should maintain and extend the works begun and placed for that purpose in behalf of navigation, and incidentally to their own great benefit.

At the present rapid rate of loss all dikes constructed, which to date have cost about \$8,500,000, will be destroyed in 50 years; add to this sum \$50,000 for annual repairs to the dikes and at the end of 50 years \$11,000,000 will have been expended without advanced improvement; revetments also (total cost \$6,000,000) are deteriorating, but not at such a rapid rate as the dikes.

If it be the intent of Congress that the present deterioration of these works and the river banks shall continue, then, it is recommended that the work of river-channel improvement in this district be confined to dredging alone, at an annual cost of about \$350,000. But, if the improvement works existing in 1922 are to be preserved and maintained in good condition a minimum sum of \$1,000,000 should be made available for the fiscal year 1923 and the same sum annually for at least 5 years thereafter in prosecution of the plan first outlined above. A reexamination of the project—a revision of that made in 1919 and again in 1915—appears desirable and necessary, and therefore it is recommended.

That does not answer the question I asked of the amount of money necessary to make the river from Cairo to St. Louis navigable, so that these barge fleets could be carried up the river.

General TAYLOR. Well, the expenditure of \$1,000,000 a year for five years would effect that purpose.

Senator REED. It would effect it?

General TAYLOR. Yes, sir.

Senator WADSWORTH. General, may I ask you would any part of the \$42,000,000, it is proposed to appropriate, be available for that work?

General TAYLOR. Yes, sir; it would receive an allotment out of that \$42,000,000.

Senator REED. How much?

General TAYLOR. In making up the amount of \$42,000,000, \$1,000,000 was included for that section of the river.

Senator REED. How much are you going to have for the Missouri River under this bill as it stands?

General TAYLOR. I could not say until I know what it carries.

Senator REED. Assuming it carries the \$42,000,000.

General TAYLOR. Assuming it carries the \$42,000,000, I think there was one small allowance made in there for maintenance, something like \$100,000.

Senator REED. And that leaves that river to run at large and carry an immense amount of silt into the Mississippi River and create bars there?

General TAYLOR. Yes, sir.

Senator REED. As a matter of fact, that Missouri River project has been approved a half a dozen times by the engineering department. Has it not?

General TAYLOR. It has been approved several times; yes, sir.

Senator REED. It ought to be carried in this bill.

General TAYLOR. But until an appropriation of sufficient size to carry it on at a reasonably economic rate is made, we are simply confining our work to maintenance—that is all. It is one or the other, either barely maintenance or else give us an appropriation of \$1,500,000 or \$2,000,000 a year to complete it as a business proposition.

Senator FLETCHER. Has that proposition been adopted by Congress?

General TAYLOR. Yes, sir.

Senator FLETCHER. So you do not need any provision for it in the present rivers and harbors bill?

General TAYLOR. No, sir; merely a question of money to carry it on.

Senator REED. I am going to ask this committee to consider the proposition of increasing this appropriation a sufficient amount to renew the work on the Missouri River and complete it or bring it into shape. I understand it to be an undisputed fact that one of the great troubles of navigation on the Mississippi River comes from the immense amount of silt carried into that river annually from the Missouri River. The Missouri River project has been approved, reapproved, surveyed, resurveyed, recommended, and rerecommended. They came there and took away our boats which were bought by private capital, took them away during the war, compelled the turning of them over to the Government, and now because the boats are

not there we are told there are no boats on that river. And I want to ask the committee to increase this appropriation by at least \$1,000,000, so that much money can be set aside for the work on the Missouri River this year. I am not going into the long history of it, because I think it is familiar to the committee. But not only is the vast navigation of the Missouri River destroyed by this abandonment, but tens of thousands of acres of the most valuable land there is in the world for farming purposes is being inundated and flooded there every year. The old dikes are being swept away. The river is a rapid stream and it cuts across bends and angles; it gathers up that immense amount of soil and throws it over into the Mississippi River.

I repeat that this project of navigating the Mississippi River is not a project that can be confined to the stem stream alone. It has got to include these branches.

We are talking about doing something for the farmers and something for the building up of this country. Here is the one great practical proposition there is before the American people to-day, a thing that Congress can do and do within the limits of the Constitution and within the limits of good judgment and good business sense, and I am urging the committee to make that raise, and I believe it will be carried through in the House. I believe it will be accepted. I can not, of course, speak for the House, but there were Members of the House over here this morning who are interested in the matter. We can get the money, and money spent this way brings back money. It is not wasting money; it saves the loss of property and it helps us to get this great plan of transportation carried out. And I urge the committee with all the force that I have to do this. This is no idle plan; it is no dream; it is something that we have already proven is entirely practical by the statements made by these two gentlemen concerned in it here—the colonel and Mr. Brent—this morning.

I am obliged to you.

Senator SPENCER. General, the \$42,000,000 that is appropriated is no more than about half of the actual amount that has been expended in the last two years on the inland waterways; is not that right?

General TAYLOR. Last year we spent just about \$41,000,000.

Senator SPENCER. And the year before that you spent a little more?

General TAYLOR. No; the year before that we spent a little less than that. We did not keep up with the work; we were falling behind all the time.

Senator SPENCER. That is, the Government in the last two years has spent something in the neighborhood of \$80,000,000?

General TAYLOR. Yes, sir.

Senator FLETCHER. How could you do that when you only had an appropriation of \$15,000,000?

General TAYLOR. We had an accumulation. The 1918 and 1919 bills, you see, carried considerable sums, and during the war work was practically at a standstill, and then in 1919, on account of the high prices and our inability to get work done, we also did comparatively little work. During the last two years we have been doing considerable work and we have now expended the balances accumulated from the previous appropriations, so that next year we have to depend entirely on the appropriation received from this session of Congress.

Senator SPENCER. That is to say, the appropriation of \$15,000,000 for last year and the appropriation of \$13,000,000 the year before that, when added to the unexpended balances made available in the appropriations of the previous years, enabled you to spend over \$40,000,000 in each year for last year and the year before.

General TAYLOR. Last year about \$40,000,000 and the previous year a little less than that.

Senator SPENCER. So really this appropriation is substantially no more than what you have actually expended in each of the last two years?

General TAYLOR. Yes, sir.

Senator SPENCER. If you had \$5,000,000 more in this appropriation, would that enable you to take care of the situation on the Missouri River that Senator Reed has outlined and on other inland waterways?

General TAYLOR. It would help. I can say that when the reports from the district engineers came in last June as to the amounts they could profitably use next year, that is, from the appropriations made this session, they totaled \$63,000,000 and we went over them and cut out everything that could be postponed, or that was not essential to be done this year, and that made a total of \$42,000,000.

Senator SPENCER. Senator Reed, I know there is a condition now where the state farm in Callway County is being threatened with destruction, and the water plants at Glasgow and Decatur are being threatened with destruction by breaks in the banks, and in each of those cases the department does not feel now that they have the funds to enable them to meet even that seeming emergency.

General TAYLOR. We have no funds, no, sir.

Senator SPENCER. And that would be cured if an appropriation of \$5,000,000 were added to this bill?

General TAYLOR. That would help very much. That same condition you speak of at those two localities exists, though to a very much greater extent, from Kansas City to the mouth of the river. Those are characteristic of the condition that is occurring all along the river.

Senator FLETCHER. Has the Department plant enough and machinery and facilities enough to use economically within 12 months an amount in excess of this appropriation?

General TAYLOR. Yes, sir. I can say that there was a representative of one of the very large dredging companies in the office within the last two days, and he stated that they would finish the contract which they have in Galveston Harbor about the middle of this month, between the middle of this month and the first of next month, and that it would be the first time in the history of this company when that contract is completed that it had no work for the Government. That will end every contract they have with the Government, and a very large percentage of their plant is out of business at the present time—tied up. There is comparatively little private work going on and no public work.

Senator FLETCHER. Do I understand, Mr. Brent, the amount you want here is \$300,000?

Senator SPENCER. \$330,000.

Mr. BRENT. That is the absolute necessity to make up our deficit.

General TAYLOR. I am afraid the impression Mr. Brent might have given the committee is that the contract we made with Mr. Goltra was entered into for the purpose of competition with the lower river. Of course, there was no such intention as that. As a matter of fact, we simply acted as agents for the Shipping Board. It was no voluntary act on our part at all that we made the contract, and everything connected with it indicated that the boats were to be operated on the upper river, and it was as much of a surprise to us as it was to Mr. Brent to know that they also intended to go on to the lower river in competition with the barge line there.

Mr. BRENT. I would not have the impression gained from my statement that I thought there was any intent at all.

General TAYLOR. That is what I thought, but I thought that impression might be gained.

Mr. BRENT. The possibility is there.

General TAYLOR. I thought you did not intend to convey that, but I was afraid the committee might get that impression.

Mr. BRENT. I am glad you corrected it, because I have no such thought.

General TAYLOR. Still another point I would like to correct: Mr. Brent stated the contract called for turning the boats over to the lessee as finished. It does not prescribe that they shall be turned over. It says the contract shall run for five years from the time the first boat is turned over.

Senator SPENCER. From the date of delivery.

General TAYLOR. From the date of delivery. We have not been able to turn the towboats over, simply for the reason they have not been finished. We have had more trouble with them than we have ever had with any contract. There has been a long time getting the boats finished; they are months and months behind the schedule, but they are about finished now, so the whole fleet is about ready to turn over to the lessee at any time, and his negotiations have recently been direct with the Secretary of War, so the troubles that Mr. Brent speaks about, his being told that we must deliver the boats at a certain time, have been the result of instructions we got from the Secretary and brought about by negotiations had direct between him and Mr. Goltra.

Senator SPENCER. Some of the boats have been completed?

General TAYLOR. Yes; the barges.

Senator SPENCER. The contract reads that it shall run from the date of delivery of the first towboat or barge?

General TAYLOR. Yes, sir; or power boat.

Senator SPENCER. So if a barge or power boat had been delivered when it was finished the date of his contract would have begun to run from then?

General TAYLOR. That is correct. We would have been able to deliver the barges about the beginning of the low-water season on the river, but there were no towboats on the river which could safely handle those large barges, and it would have been dangerous to the plant and very bad for him to have turned them over to him at the beginning of the low-water season without the necessary power plant to handle them, and it would have been a hopeless proposition

for him to have tried to have done anything with them; and, as a matter of policy, we did not attempt to force the barges without the towboats on him at that time.

Senator REED. One other question. You said you had requests for \$63,000,000; that is, that that was the aggregate of the estimates made by the engineers that they could economically spend; then you cut that to \$42,000,000; in other words, you reduced it to \$42,000,000 by excluding the Missouri River—practically abandoning it?

General TAYLOR. By excluding everything, Senator, that we thought was not absolutely necessary at the present time and in accordance with the last two laws which have been for the interest of commerce and navigation.

Senator REED. They were limited to peculiar conditions and were passed to meet the peculiar conditions.

General TAYLOR. Yes, sir.

Senator REED. But if the Missouri River project is to be carried on you need the additional money?

General TAYLOR. We do.

Senator REED. Here is a telegram I want to read:

Chicago Canal flooded Columbia bottoms. Homes and crops ruined. Take action.

Do you know anything about that?

General TAYLOR. They have had very high water in the Illinois River due to the excessive rainfall, and the people living on the lower river attribute part of their trouble, which is undoubtedly so, to the water that comes from the Chicago Drainage Canal. They are putting through about 8,000 second-feet. That, added to the water produced by this excessive rainfall, has caused a lot of trouble. If you take the 8,000 second-feet off they would still be having trouble.

Senator REED. Is there any remedy for this?

General TAYLOR. Nothing but to prevent the rainfall.

Senator REED. Is there any way the river could be harnessed there and this condition prevented if you had time?

General TAYLOR. If we had time and money we could levee it, of course.

Senator REED. In other words, the situation is this: There was enough damage done by one flood in the Ohio Valley about three or four years ago to have built all the dikes along all the rivers in the country, I think.

General TAYLOR. If it were not for the levees on the Mississippi River to-day there would be not less than 12,000 square miles under water to-day, and I think probably a great deal more than that.

Mr. BRENT. The city of New Orleans included.

General TAYLOR. At New Orleans they have to-day the highest water they have ever known, and it will continue to rise, according to the weather reports, for nearly a month.

Mr. BRENT. For two weeks the Lake Borgne Lock on the Warrior River has been closed, and we have not been able to open the lock even to get through with small boats.

Senator FLETCHER. Will it continue to rise or remain high?

General TAYLOR. It will continue to rise. It will rise about a foot more according to predictions. Yesterday it was 22.1 feet, and the

prediction is it will rise to 23 feet; and 22 feet is the highest they have ever known.

Senator SPENCER. How high is their protection?

Mr. BRENT. Twenty-two feet; and they will have to pile sand bags on the levee.

Senator FLETCHER. Are the levees holding?

Mr. BRENT. Yes, sir; the levees are holding all right, but they are not high enough.

General TAYLOR. At Arkansas City we have advices that the water is up over the top of the levee for 25 miles, and 25 miles of those levees are subject to attack and in a very serious condition to-day.

Senator REED. I stated when I came in here that I came with a very modest request. I wish I could get this committee to go in here and recommend raising this appropriation enough so that these terrible menaces that come from time to time could be done away with and that this job could be completed. I know the desire to keep down appropriations, but the price of one battleship added to this bill would do an immense amount of good and probably save one hundred times its cost to the people of the country.

Senator FLETCHER. That flood situation is covered by this \$6,-670,000 appropriations for the Mississippi River, I take it.

Senator REED. I am going to leave it with the committee, and I hope they will do all they can.

Colonel ASHBURN. I would like to state to the committee that in my previous testimony I stated the channel was completed. It is well known by everybody that successful operation could be had on the Mississippi River only when joint rates are in effect with the railroads. Mr. Goltra has no such rates, and, moreover, under his contract he could not operate for less than the railroad rates without the consent of the Secretary of War. We knew that there was a menace in Mr. Goltra's operation of the fleet if he could operate at less than railroad rates, and we went to the Secretary of War and he said he would not give any such permission—that he could not allow him to operate in competition with the established line. Much to his surprise and to that of everybody else, it turned out that Mr. Goltra already had permission to operate at 80 per cent of the rail rate.

Now there is one thing, Mr. Chairman, in this bill that was put in by the House which raises a salary that nobody wants to raise. It is on page 116: "but no person shall be employed hereunder at a rate of compensation in excess of \$3,000 per annum except one at \$4,500." I have no employee that is paid \$4,500. There is one at \$4,000. That is the only employee.

Senator FLETCHER. Why was that put in?

Colonel ASHBURN. It was put in because I testified before the House committee that I had one employee that I paid \$7,000 and they wanted to limit the amount I could pay. But I do not have a man in my office to-day who gets over \$4,000.

Senator WADSWORTH. At this point I want to place in the record a letter I have received from Senator Underwood, a short letter, relating to the Mississippi and Warrior Rivers transportation proposition.

It is as follows:

UNITED STATES SENATE.
Atlantic City, N. J., April 18, 1922.

HON. JAMES W. WADSWORTH.

United States Senate, Washington, D. C.

MY DEAR SENATOR: I am very much interested in the supplemental Budget estimate for the Mississippi-Warrior barge service. The War Department first asked for an appropriation of \$30,000 only, and at that time felt that they would be able to collect from the sale of the New York barges a sufficient amount to carry on the barge operations on the Mississippi and Warrior. Later they found that the collection would not be available for 1923, so a supplemental estimate was sent in for \$300,000 additional with the approval of the Budget officer. This supplemental estimate reached the Appropriations Committee of the House too late to be acted on.

In view of this fact, I am writing to express the hope that the amount be added to the bill by your committee.

With every good wish, I am, sincerely yours,

O. W. UNDERWOOD.

(Senator Heflin submitted the following statement and it was ordered inserted in the record at this point:)

Mr. Chairman, I appear before you for the purpose of advocating the appropriation of \$330,000 for the barge line service on the Warrior River. The Government's policy as laid down in section 500 of the transportation act provides for the encouragement, promotion, and development of water transportation.

The Secretary of War recommended the \$330,000 for the Mississippi-Warrior barge line service. Colonel Ashburn of the War Department, who appeared before the Appropriations Committee of the House, recommended it. The Budget Committee has recommended the amount of \$330,000, asked for here, for this service.

The double transfer of freight at Violet, it is estimated, costs about \$20,000 a month. This expense will cease just as soon as the State of Louisiana completes the Industrial Canal from the Mississippi River through Lake Pontchartrain. It is claimed that this canal will be completed in four or five months. When it is completed the \$20,000 a month, or \$240,000 a year, for transfer service at Violet will be eliminated.

When Colonel Ashburn was before the Appropriations Committee of the House Mr. Anthony asked him this question: "Is there any hope of your being able to overcome the deficit on the Warrior?" and Colonel Ashburn answered, "Yes."

The Interstate Commerce Commission has been asked to grant a joint water rail rate to and from points on the Warrior and it is expected that this request will be granted soon.

This service has already been of great value to the people served along the Mississippi and Warrior Rivers, and the prospects for not only a self-sustaining but a profit-making service are so bright and promising that I feel justified in asking the Government to provide the \$330,000 requested. This money may not be needed; if not, it will not be used. But it ought to be, it must be, provided, so that if anything should happen this barge line service will be kept going and this transportation project be given sufficient time to establish itself in the transportation business. From the testimony on the subject you are warranted in granting the amount desired.

Senator WADSWORTH. Are there any other questions? If not, we will recess until 2.15.

(Whereupon, the committee recessed until 2.15 p. m.)

AFTERNOON SESSION.

The subcommittee met, pursuant to the taking of the recess, at 2.15 o'clock p. m., Senator James W. Wadsworth presiding.

Senator WADSWORTH. Congressman Thompson, of Ohio, is here, and would like to have an opportunity to discuss certain matters in connection with the river and harbor appropriations.

**STATEMENT OF HON. CHARLES J. THOMPSON, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF OHIO.****EXAMINATIONS, SURVEYS, AND CONTINGENCIES FOR RIVERS AND HARBORS.**

Representative THOMPSON. Mr. Chairman and members of the committee, I wish to call the attention of the committee to line 17, on page 115 of H. R. 10871, and to the figure \$325,000.

On the 27th of February I introduced House bill 10615, in the House of Representatives, which was referred to the Committee on Appropriations by reason of the parliamentary situation of having had previous legislation, and it was germane to go to the committee.

In introducing that bill, however, I introduced it before the Ohio delegation had a meeting. The Ohio delegation afterwards had a meeting and appointed a committee of three members of the Ohio delegation, composed of Mr. Cooper, who is present, Mr. Kearns, and myself to wait upon the Appropriations Committee of the House and call their attention to House Document No. 188, Sixty-seventh Congress, second session, on page 7 of which General Taylor of the board of engineers had recommended \$225,000 for the survey of three barge canal routes, Nos. 1, 3, and 4, to connect the Ohio River with Lake Erie and Lake Michigan.

When we appeared before the Committee on Appropriations it developed that the Budget had fixed the item of \$250,000 for a survey, and the Appropriations Subcommittee had already passed the item and cut the Budget \$50,000; but the Subcommittee on Appropriations—and it was agreed to afterwards by the whole committee—increased that appropriation by \$125,000. They added \$125,000, raising it to \$325,000; and to make it clear in the hearings here I want to read from the record an extract from the general debate in the House on March 14, and call attention to page 4327 of the Congressional Record. My colleague, Mr. Chalmers, of Toledo, interrupted Mr. Anthony, chairman of the subcommittee of the Committee on Appropriations, which handled this estimate. [Reading:]

Mr. CHALMERS. I understand this \$325,000 is for a special purpose.

Mr. ANTHONY. Not entirely a special purpose.

Mr. CHALMERS. That is for the survey of certain canals in Ohio.

Mr. ANTHONY. No. The committee agreed originally upon \$200,000 for survey purposes, after which a number of Members of the House appeared before us and impressed upon us the necessity of a larger sum for this purpose, and the committee increased the amount from \$200,000 to \$325,000, having specifically in view the survey of three projects in contemplation for the construction of canals between Lake Erie and the Ohio River.

Mr. CHALMERS. I understand that estimate is \$225,000.

Mr. ANTHONY. The committee has increased its appropriation only \$125,000.

Mr. CHALMERS. That would leave only \$175,000 for the general survey work.

Mr. ANTHONY. It would leave \$200,000.

Now, I wish to submit to this committee that these canal propositions, across the Ohio, have been hanging fire, and we are anxious to have them completed; and it is evident to my mind that there ought to be \$150,000 added to this appropriation to bring it up to the recommendation of the engineers as indicated on page 7 of House Document 188 of the Sixty-seventh Congress, second session.

As you all know, the House, in Committee of the Whole House on the state of the Union, increased the rivers and harbors appropriation, but did not increase this canal appropriation accordingly. It was not discussed.

Senator WADSWORTH. Have these projects been approved by Congress?

Representative THOMPSON. They have. There has been previous legislation.

Senator WADSWORTH. You mean a survey was ordered?

Representative THOMPSON. A survey; yes. Now, General Taylor is here, and I am informed by him that there are a number of appropriations or projects in the Rivers and Harbors appropriation that will more than use up this \$200,000; and as this appropriation is in a lump sum, with no specific limitation as to its use for the canals, except as specified here in the record, we in Ohio would like to see sufficient money to put these surveys over all at once, because, if they would take all this money for canals and put it on one route, we would have to wait for further appropriations to get all the reports in of all the routes before there would be any action, and there would be nothing gained and there would only be a loss of time. This commits the Congress to these surveys, and if we do not get the money now, we would have to get it on later appropriations, which would delay the work on the project.

That is about all that I care to say on the subject. I would like to have you hear General Taylor. I would like to have you hear Mr. Cooper and Mr. Cable and Mr. Welty, a former Congressman here, and Mr. Krell. They are all interested in this proposition.

Senator WADSWORTH. General Taylor, will you make a statement?

STATEMENT OF BRIG. GEN. HARRY TAYLOR, BOARD OF ENGINEERS FOR RIVERS AND HARBORS.

MIAMI AND ERIE CANAL, OHIO.

General TAYLOR. I think I might give you a little history of this, to show you why it is necessary to get a little more money. It might clarify the situation a little bit.

The river and harbor act of March 2, 1919, provides for the following item:

The Miami and Erie Canal, Ohio, including a branch canal connecting the Miami and Erie Canal with Lake Michigan, and such other routes between Lake Erie and the Ohio River as may be considered practicable by the Chief of Engineers, with a view to securing a channel 12 feet in depth with suitable widths, or such other dimensions as may be considered practicable, including any recommendation for cooperation on the part of local interests.

Following the usual procedure, in that case we made a preliminary examination. Ordinarily the money which is provided for in a lump sum which carries the money that we use for preliminary examinations, surveys, and contingencies is available for the survey which is made subsequent to the preliminary examination; but in this case the amount required for the surveys which were necessary to give us the data to make a complete report was so large that we could not take it out of the general allotment. So that contrary to the usual practice—the present practice—we submitted this report to Congress which is to be found in the document just referred to, which gives the report of the investigation which has been made up to date, and the statement that in order to complete it \$225,000 will be necessary; our idea being that Congress could take it up in any way, either by special appropriation or by increasing the amount carried in any bill for examinations, surveys, and contingencies, by

a sufficient amount; otherwise, that the small amount which is appropriated each year would be insufficient to enable us to make sufficient allotment to finish up those surveys for a number of years.

I will later explain why we could not make the allotment at this time—or now, just as you wish.

Senator FLETCHER. How much of that \$325,000 carried in the bill will be needed for further surveys?

General TAYLOR. It will depend a good deal, Senator, upon what the bill carries when it is finally passed. As introduced in the House—

Senator FLETCHER. I mean, how much of the \$325,000?

General TAYLOR. I am explaining that. The pending river and harbor bill, which is now before the House, when it was reported from the committee carried authorization for 99 surveys, and I presume likely others also, before it became a law. In other words, there will be over 100 surveys to be provided for.

In addition to providing for those surveys we have to pay out of that appropriation a certain proportion of the expenses of the office of the Chief of Engineers. Under the law we are authorized to pay \$50,400 for the overhead expenses of the office. That pays for clerks and assistant engineers and draftsmen who are directly engaged on river and harbor work.

We also pay out of that the expenses of the river and harbor board. At present those expenses run close to \$100,000 a year. That includes all the expenses that are incurred in these investigations we make. It includes the amount for what is called our port-facilities section, the river and harbor division; and then we also have to pay a certain proportion on the Federal Power Commission. That all comes out of it.

In addition to that, we have to pay for all contingent expenses, as, for instance, when we hold a hearing in a bridge case. When there is a bridge to be built over navigable water we have to hold a hearing in order to give all sides an opportunity to present their views to the department. During the course of the year we have about 3,000 applications for permits. There is more or less expense connected with each of those permits.

All of those expenses have to be paid out of this current appropriation, and it will probably take close to \$200,000.

That would leave available for all the examinations and surveys authorized about \$125,000 out of this \$325,000.

Senator FLETCHER. That \$200,000 is to cover what you call preliminary examinations?

General TAYLOR. No, sir; that covers the contingent expenses. The balance would be for the surveys. So that, with over 100 to care for, it would mean that we could not allot very much to any one examination.

Senator FLETCHER. You make a certain examination just from the office, without having to go out in the field?

General TAYLOR. We make a great many like that. Out of the 100 which are in the bill, probably 50 per cent can be made on the data that we have in the office. The reports on 50 per cent of the cases can be made on the data that we have in the office, but that means more or less clerical work; it means, perhaps, an assistant

engineer making investigations and working out the data. The expense is not very much for any one of them. It may be \$100 or \$200. But when you come to take over 100 of them, that amounts to something. Some out of that number will involve rather expensive surveys.

Senator FLETCHER. You think, then, as I gather, that you will require this \$325,000 really outside of this Ohio business?

General TAYLOR. No, sir; I think we can get along with \$250,000. It will be very close estimating, but I think \$250,000 will carry it outside of what is allotted to the Ohio survey. That would leave approximately \$75,000 to allot to the Ohio survey.

Senator SPENCER. How much will be necessary to complete that?

General TAYLOR. \$225,000. There are three separate routes.

Senator SPENCER. There would have to be, under those figures, \$150,000 added to this bill?

General TAYLOR. Yes, sir.

Senator WADSWORTH. Is there some one else here who would like to be heard, Mr. Thompson?

Representative THOMPSON. Mr. Cooper of Ohio.

Senator WADSWORTH. We will be glad to hear you, Mr. Cooper.

STATEMENT OF HON. JOHN G. COOPER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO.

Representative COOPER of Ohio. Mr. Chairman and members of the committee, I do not know that I can add anything to what Congressman Thompson has already told you. I want only to say that for many years we, the people of Ohio, have been very much interested in trying to have a Lake Erie-Ohio River Canal. In my district route No. 1 has been surveyed, and I believe all they need now is \$25,000 to check up on that survey. That will complete a canal from the Ohio River up through the Youngstown district to the lake somewhere between Ashtabula and Cleveland.

Senator SPENCER. Striking the Ohio just below Pittsburgh?

Representative COOPER of Ohio. Striking the Ohio River just below Pittsburgh; and our people are very much interested in getting that canal built between the Ohio River and the lake; and as General Taylor has told you, and as Mr. Thompson has told you, there are three projects that are contemplated; and I think the Army engineers want to go very carefully over all three of those projects, and then report to Congress which is the best and most feasible route to adopt.

Senator SPENCER. What is the length of that route you want?

Representative COOPER of Ohio. About 80 miles, I think, is it not, General—route No. 1? There has always been an immense amount of money expended by different surveys, both by the State of Pennsylvania and—

General TAYLOR. The distance is 101.5 miles.

Representative COOPER of Ohio. The State of Pennsylvania has spent more than \$100,000.

General TAYLOR. It has spent considerably in excess of that.

Representative COOPER of Ohio. In making these surveys, as I said, the survey for this route is almost completed, and I am in-

terested in having the Army engineers get the appropriation to complete these surveys.

The transportation problem in Ohio, and especially throughout the great industrial district which I have the honor to represent, is very acute to-day; and probably you know the amount of tonnage that passes up through those districts to the lake ports; and if the committee can in any way consider favorably the request of the Army engineers, I know that it will please me very much, and also the people of Ohio.

Senator SPENCER. Where will that strike out from the Ohio River?

Representative COOPER of Ohio. I do not think that it has been determined exactly where.

General TAYLOR. In the neighborhood of Ashtabula.

Senator SPENCER. Where do you calculate that it will strike the lake?

General TAYLOR. No. 2, at Cleveland.

Senator SPENCER. And at the same place on the Ohio?

General TAYLOR. No; Marietta. No. 1 goes from Pittsburgh to Ashtabula, No. 3 goes from Cleveland to Marietta, and No. 4 from Portsmouth to Sandusky.

Senator SPENCER. What is the length of those routes?

General TAYLOR. The first is 141 miles, No. 3 is 235 miles, and No. 4 is 240 miles.

Representative THOMPSON. No. 4 is the one we represent, and it branches from Defiance and connects with Lake Michigan. We connect Lake Michigan and Chicago with our district from Toledo and Cincinnati. That is the reason ours is longer and requires more cash for the survey.

General TAYLOR. Taking that into consideration also, it makes the distance nearly 400 miles.

Representative THOMPSON. That joins the canals.

General TAYLOR. Yes.

Representative COOPER of Ohio. If I may be permitted, the report which Mr. Thompson and General Taylor refer to almost eliminates route No. 2, does it not?

General TAYLOR. Yes.

Representative COOPER of Ohio. That is, route No. 2 will not be considered in these projects, so that would leave routes 1, 3, and 4. I do not think I have anything else to say.

Senator FLETCHER. What is the depth of channel proposed?

General TAYLOR. They estimate for a 12-foot channel—12 feet or whatever other depth might be practicable. We are figuring on 12 feet, with practically the same dimensions as the New York barge canal.

Senator WADSWORTH. May I ask you, General, at this point: Will the construction of any one of these canals involve the diversion of water from Lake Erie?

General TAYLOR. No, sir; the level of all of them is higher than that of the lake. There would be leakage to the lake rather than from it.

Senator WADSWORTH. That means that you would not interfere with the treaty?

General TAYLOR. No; we would not interfere with the treaty. I would say that it might introduce a little more water into the lake. Either way, the difference would be very small. We would get our supply for the canal from the summit level, where we would take it from the rivers and lakes on the summit.

Senator WADSWORTH. Whom else have you, Mr. Thompson?

Representative THOMPSON. We would like for you to hear Mr. Cable.

STATEMENT OF HON. JOHN L. CABLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO.

Representative CABLE. Mr. Chairman and gentlemen, the construction of a canal from the Ohio River to Lake Erie is not a district proposition, or even a State proposition. It involves a subject of national importance, and particularly for Ohio, Indiana, Pennsylvania, and Kentucky.

We are not here to-day to discuss the respective merits of the several routes, but to lay before this committee the question of whether they will recommend an additional appropriation. The appropriation in the House carries with it \$75,000 for the survey of these various routes.

Representative THOMPSON. \$125,000.

Representative CABLE. I understood General Taylor to say \$75,000.

Representative THOMPSON. The record shows that the committee added \$125,000 for this purpose.

Representative CABLE. The estimated cost of route No. 1 is \$25,000. The engineers have eliminated route No. 2.

The estimated cost of route No. 3 is \$85,000; of route No. 4 the estimate cost is \$115,000. This makes a total of \$225,000. It is my opinion that this entire appropriation should be taken care of in order that all the routes should be surveyed so that we can, as soon as possible, arrive at some definite conclusion as to the route that the Army engineers care to recommend.

I want to direct the attention of the committee to the syllabus of their report, and I would like to have it go into the record. They have a report here which in effect says that they should have the entire appropriation, as it is not practicable to go ahead with part of an appropriation and survey a part of each route.

I just talked with General Taylor to determine whether with a smaller appropriation they would take one or two routes and survey them, and he says that they will expend a certain amount of money on each route, in his opinion, at present; and I think we ought to go ahead and clean up the whole proposition, because it is of national importance.

I would like to have this syllabus inserted in the record.

Senator WADSWORTH. Very well.

Representative CABLE. I believe that is all I have to say.

(The extract from the report offered by Representative Cable is here printed in the record as follows:)

REPORT OF THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS.

SYLLABUS.

The Board of Engineers for Rivers and Harbors finds it impracticable to satisfactorily determine questions of cost, relative merit, economic necessity.

and advisability without further study of route No. 1 and detailed surveys of routes Nos. 3 and 4. The estimated cost of such further investigations is \$225,000, and as it is obviously impracticable to allot such a sum from the appropriation for surveys and contingencies, it deems it advisable to place the facts before Congress with the recommendation that the survey be made.

Representative THOMPSON. I would like to have you hear from Congressman Fairfield, of Indiana, on this subject.

Senator WADSWORTH. We will be glad to hear him.

**STATEMENT OF HON. LOUIS W. FAIRFIELD, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF INDIANA.**

Representative FAIRFIELD. Mr. Chairman and gentlemen of the committee, I represent the twelfth Indiana district, in which is situated the city of Fort Wayne. Our people have been interested for a number of years in the contemplated barge canal connecting Lakes Erie and Michigan. It is a part of the plan as outlined in the report for No. 4; am I right?

General TAYLOR. That is correct.

Representative FAIRFIELD. Of course, our people are very much impressed just now with the need of waterway development. The acuteness of the transportation situation but emphasizes the necessity, in my judgment, of this country entering upon a waterway development that will be commensurate with its size and its needs; and as for canalization projects, of course, we all understand that they can only obtain in a country in which the commerce is already developed or in which it is inevitable that it will be developed.

One other consideration is needed, and that is that the physical features of the country are such that water is in abundance for the needs of the canal.

Personally, I can not think in terms simply of the district or of the particular portion of the State which I represent, and I am here only to emphasize my conviction that if ever there has been a time in the history of the country when waterway development should be taken up, not by piecemeal but in units, in those particular territories in which there is extreme congestion, now is the day, and I am here to support most heartily the recommendation of Mr. Thompson that this appropriation be increased by \$150,000, in order that there may be no more piecemeal investigation of these projects, but that they may be thoroughly investigated, and of course we are hoping that favorable reports will be made.

The imagination of our people in northern Indiana has been stimulated by the fact of development of a barge canal through northern New York, and inasmuch as that is a 12-foot canal they have conceived the idea that a barge canal across from Lake Michigan to a junction with the Miami canal at Defiance, which is the proposed route, would add very materially to the tonnage of the barge canal.

Of course, you men are more familiar with this subject than I myself, and I came only to express the conviction and the hope that this committee will give us the additional \$150,000 and enable the Army Engineers to carry on and make a complete survey covering a territory that is of national importance, in my judgment. I thank you, Mr. Chairman.

Representative THOMPSON. We have here a former Member of the House, Mr. Welty, who would like to be heard on this subject. He represents, I will say, the Central Inland Waterway Association.

STATEMENT OF MR. B. F. WELTY.

Mr. WELTY. Mr. Chairman, I was hoping that Senator Pomerene and Senator Willis could have been here to-day, especially Senator Pomerene, in support of his bill, S. 3232, which provides for an appropriation of \$225,000, that is to be expended as follows [reading from bill]:

For the investigation of the Miami and Erie Canal, from Cincinnati to Toledo, Ohio, including the branch canal connecting the Miami and Erie Canal with Lake Michigan, the sum of \$115,000; for the investigation of a proposed canal from Portsmouth to Sandusky, \$85,000; and for the investigation of the proposed canal from Pittsburgh to Lake Erie, \$25,000.

I suppose that you can hear the two Senators later on. They are both out of the city, and the arrangement was made for our hearing this morning, so that it was thought best to proceed.

We have had a number of surveys made of the Ohio canals. The first survey was made in 1881, and known as the Wilson report. It was only a preliminary survey.

Then there was another one made in 1896, known as the Chittenden report. At that time Congress appropriated \$50,000 for the purpose of making this preliminary survey. The War Department, in the Chittenden survey made, I think, three investigations. One was the Miami and Erie route and another was from Portsmouth to Sandusky, by way of Columbus. The other was the Marietta-Cleveland route.

Senator Fletcher remembers that in 1919 this matter came up again, and was incorporated in the rivers and harbors bill—the act of March 2, 1919—and provided for a survey for the Miami-Erie Canal, from Cincinnati to Toledo, and then, at the suggestion of General Taylor, the words were added “and such other routes between Lake Erie and the Ohio River as may be considered practicable by the Chief of Engineers.”

I think at that time Congress had appropriated over \$150,000,000 for the improvement of the Ohio River and its tributaries; so that barges could be loaded right from the mine, for the purpose of taking the coal, not to the “Sunny South,” but to the North. The total appropriation now is over \$162,000,000.

Now, we are up to this situation. These rivers in Kentucky and West Virginia are canalized; but even though they load the barges at the mine, they have to dump the coal onto the north bank of the Ohio River and load it on the cars there, and take it across the State of Ohio and there transfer it on boats for the Northwest; so that it is simply a question of a matter of time when a canal or canals will be built across the State of Ohio. Thus it is causing a great injustice not only to the States north and south of this, but to us in the central part of the State. For instance, coal is delivered at Toledo for water shipment for 83 cents less freight from Cincinnati than to Lima, Ohio, even though they haul it 75 miles farther.

Now, the reasons, probably, the Ohio canals come to the foreground all the time is because in 1828 Congress appropriated large tracts of

land for the purpose of building the Miami & Erie Canal. There are three different acts of Congress—the act of May 24, 1828; another is the act of May 2, 1830; the third one is the act approved March 2, 1833. I think that the total amount appropriated was approximately 2,000,000 acres of land, with provisions to be sold under the direction of the Legislature of Ohio for the purpose of building the Miami Canal, first, and then I think 500,000 acres were granted for the purpose of paying the obligations of the State of Ohio contracted in the building of this and other canals.

Just lately, and since the preliminary survey has been going on, the matter of the title came into question. The State of Ohio claimed—or at least they went on the assumption—that the title to the Miami & Erie Canal belonged to the Federal Government. They now have a lease in contemplation by the traction people of Cincinnati involving an annual rental of \$32,000. From press dispatch I learn that the city of Dayton has offered for a portion of the canal within the city a rental of \$18,000. Other leases have been made by the State of Ohio, which were called in question by Secretary of War Weeks in a letter written to the director of waterways in Ohio calling his attention to the fact that the Miami & Erie Canal belongs to the Federal Government and that they had no right to lease any part of it except for use of this waterway.

Senator WADSWORTH. You mean they leased the right of way?

Mr. WELTY. Yes. The right of way which was granted by the Federal Government to the State of Ohio, to be sold under the direction of the Legislature of the State of Ohio for the purpose of building the Miami & Erie Canal.

Senator WADSWORTH. What was done with those lands?

Mr. WELTY. The State sold most of these lands and used the money for the purpose of building the Miami & Erie Canal, and for the purpose of paying the obligations it had contracted in the building of the other canals.

General TAYLOR. Mr. Welty, may I make a little statement there?

Mr. WELTY. Yes, sir.

General TAYLOR. The statement says that the title was in the Federal Government, but as this land was appropriated for a special purpose, that if the sums derived from the sale of the land were diverted to other purposes, then it reverted to the Government.

Mr. WELTY. Of course it could not revert unless the title was in the Federal Government.

General TAYLOR. It was a qualified title.

Representative CABLE. Is it not a fact that the title was in the State for one purpose and no other?

Mr. WELTY. No. I have here a Michigan case, found in 100 United States, at page 379, entitled "The United States v. The State of Michigan." This is a case in which former Senator Knox, while Attorney General of the United States, brought an action against the State of Michigan for the purpose of an accounting. The wording is exactly the same. They have followed the wording of the grant to the State of Ohio. In that case the court held as follows [reading]:

In this Federal statute we find the purpose of the United States in granting land. It was not for the benefit of the State of Michigan, and the State did

not thereby receive any beneficial interest in such lands. As soon as it was repaid its outlay for the cost of the construction and for the maintenance and repair of the canal, the tolls were to be reduced to such a sum as should be sufficient only to pay the necessary expenses for the charge and repair of same. Evidently, it was not supposed that the State was to profit from the grant further than such profit as might arise indirectly from the completion and operation of the canal.

Where Congress grants land to a State, to be used as provided in this statute, we think a trust, or power to dispose of the lands for the purpose of carrying out the improvement, is granted; and, in this case, no beneficial interest passes to the State by the language used, considering the whole statute.

Then, in conclusion, the Supreme Court in the Michigan case held:

We are of opinion that the bill shows a cause of action against the State of Michigan as trustee, and its liability to pay over the surplus moneys (if any) which upon an accounting it may appear have arisen from the sale of the granted lands, over and above all cost of construction of the canal and the necessary work appertaining thereto, and the supervision thereof, together with the surplus money arising from the tolls collected.

Now, what is the grant in the Michigan case?

Senator FLETCHER. What canal is this?

Mr. WELTY. This was, I think, the Sault Ste. Marie Canal. In that case the Federal Government appropriated 750,000 acres of land to the State of Michigan, to be sold under the direction of the State, for the purpose of building this canal. They permitted it to go into disuse, just like the State of Ohio has permitted its canals to go into disuse, and then President Roosevelt directed Attorney General Knox to proceed against the State of Michigan and demand an accounting. In order to show the similarity of the two grants in question, I am going to read from the act of May 24, 1828, to the State of Ohio:

The said land, hereby granted to the State of Ohio, to be subject to the disposal of the legislature of said State, for the purpose aforesaid, and no other: *Provided*, That said canal when completed shall be, and forever remain, a public highway, for use of the Government of the United States free from any toll or other charges whatever, for any property of the United States, or persons in their service, passing through the same.

Here is the grant to the State of Michigan under the act of August 26, 1852 [reading]:

And be it further enacted, That the said lands hereby granted shall be subject to the disposal of the legislature of said State for the purposes aforesaid and no other; and the said canal shall be and remain a public highway for the use of the Government of the United States, free from toll or other charge upon the vessels of said Government engaged in public service, or of any property or troops of the United States.

Now, we are up against the proposition in this that we do not know whether we own that canal. Some of the people, at least, thought Ohio had a fee simple title. But under the decision of the Michigan case there is absolutely no question any more but what the State of Ohio is simply a trustee for this property, the same as the State of Michigan was trustee for the property granted to that State by the Federal Government.

Senator FLETCHER. Did the proceeds of that land enable the State to finish the canal?

Mr. WELTY. You mean Ohio?

Senator FLETCHER. Yes.

Mr. WELTY. Yes; I think practically so.

Senator FLETCHER. Had they had some other resources?

Mr. WELTY. No; they began to build the canal under the State act. Then the State became involved financially, and the Federal Government came to their assistance, and here is further language of the grant.

Senator FLETCHER. Did they ever attempt to charge tolls on that canal?

Mr. WELTY. Oh, they always did.

Senator FLETCHER. They did?

Mr. WELTY. Yes. The grant to the State of Ohio, the first part of it reads:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there be, and is hereby, granted to the State of Ohio, for the purpose of aiding said State in extending the Miami Canal from Dayton to Lake Erie—

The State had already completed this canal to Dayton—

by the Maumee route, a quantity of land, equal to one-half of five sections in width, on each side of said canal, between Dayton and the Maumee River.

And then it goes on to describe the land.

Another matter I wish to call to the attention of the committee is how the Panama Canal discriminates against the Middle West in the territory between the Alleghany and the Rocky Mountains. Before I left Congress a year ago I was very much interested to learn why there was so much congestion in the Middle West, and I received some data from the Interstate Commerce Commission and the United States Shipping Board, and then compiled it in this manner, which is very interesting for the purpose of showing that the Middle West is unable to compete as against the balance of the country because of the discrimination of the transcontinental lines in order to compete with the Panama Canal. I will ask to put this in the record.

The table referred to by Mr. Welty is here printed in full in the record as follows:

Memorandum of freight rates furnished B. F. Welty by the Interstate Commerce Commission and United States Shipping Board, etc., for 1921.

[Rates in cents per 100 pounds.]

To—	Apples from Pacific coast points.	Fresh fruits from Seattle, Wash.	Lemons from San Francisco, Calif.	Oranges from San Francisco, Calif.	Canned fish and fruits from Pacific coast points.	Dried fruits from Pacific coast points.
New Orleans, La. ¹	105	.....	70	90	65	55
Boston, Mass. ¹	75	125	125	140	65	100
Columbus, Ohio. ¹	166	208	166	192	120	166
Indianapolis, Ind. ¹	166	208	166	192	120	166
Lansing, Mich. ¹	166	208	166	192	120	166
Lexington, Ky. ¹	166	208	166	192	120	166
Chicago, Ill. ¹	166	208	166	192	120	166
Kansas City, Mo. ¹	166	208	166	192	120	166

¹ Water rate.

² Rail rate.

Memorandum of freight rates furnished B. F. Welty by the Interstate Commerce Commission and United States Shipping Board, etc., for 1921—Contd.

To San Francisco and Seattle from—	Agricultural implements.	Machinery and parts thereof.	Stoves.	Paint.
Boston, Mass. ¹	170	200	175	100
New Orleans, La. ¹	125	156	94	154
Lexington, Ky. ²	276	303	250	154
Cincinnati, Ohio ²	276	303	250	154
Lima, Ohio ²	276	303	250	154
Toledo, Ohio ²	276	303	250	154
Lansing, Mich. ²	276	303	250	154
Indianapolis, Ind. ²	276	303	250	154
Chicago, Ill. ²	266	295	242	150
Kansas City, Mo. ²	238	266	216	142

¹ Water rate.

² Rail rate.

Mr. WELTY. For instance, you will find in the first column of the table apples can be shipped to Boston via the Panama Canal from the Pacific coast for 75 cents a hundred pounds, while it costs the entire Middle West \$1.665.

Canned fish and fruit can be shipped all the way from the western coast to the eastern coast for 65 cents a hundred pounds, while Kansas and Ohio and the entire Mississippi Valley pays \$1.205.

When it comes to shipping our manufactured products to the West you find, for instance, machinery and machine parts can be shipped from Boston, Mass., to San Francisco or Seattle for \$2 a hundred pounds, while to Kentucky, Ohio, Michigan, and Indiana it costs \$3.035 a hundred pounds, so that a carload of machinery costs over \$600 more to ship from the Middle West to the West than it does from the East to the West. I am simply mentioning this fact because the only way to relieve this congestion and discrimination is as suggested by Senator Reed this morning—to rebuild our waterways.

After the bill for survey was passed by Congress in 1919 the Legislature of Ohio passed an enabling act providing that if Congress proceeds to rebuild they are willing to build the terminals. I think that the proposed construction of the Miami & Erie Canal is a national project, because the States of Kentucky, West Virginia, and Tennessee are just as much interested in this proposition as we are in Ohio. Likewise, the State of Michigan and the people in the Northwest are vitally interested in being able to receive cheaper coal from south of the Ohio River. So that the whole thing should be treated as a national and not a local project. As stated, we have had three preliminary surveys. The thing to do is to determine it forever, so that Congress can act intelligently. Instead of making appropriations for a part of their canal, they ought to make an appropriation for all. Since the report of the Board of Engineers in this matter, the Central Inland Waterways Association checked up the cost of a field survey of the Miami & Erie Canal and found that it cost approximately \$115,000. That is all I have to say in this matter.

Senator FLETCHER. Is this Miami & Erie Canal being used?

Mr. WELTY. It was used until 1913. At that time we had a flood—such as they have now. Before that time, about two years before that time, the Legislature of Ohio appropriated \$250,000 for the purpose of deepening and widening the Miami and Erie Canal from

Dayton to Cincinnati; but after that flood all of the remaining boats were sold to a transportation company for \$50,000 and with the added agreement that they would carry the products of the factories owning these boats to the Cincinnati terminal for nothing. It is the old story of the destruction of waterways by the railroads. This canal was used all the time until that time. The other canals were abandoned in about 1870.

The Miami and Erie Canal is still there, and because of the high freight rates boats are being built for use between Toledo and Defiance. This question is in an unsettled condition, because of the question of the title. Personally I think that under the decision in the Michigan case there is no question but what the title belongs to the Federal Government, but something should be done to clear up that situation, and I hope the Senate will add \$150,000 to the amount allowed by the House.

Senator FLETCHER. They have water in the canal between Miami and Erie?

Mr. WELTY. Yes, sir.

Senator FLETCHER. These people want to rent it for the purposes of the waterway, is that it?

Mr. WELTY. No, sir; Dayton wants to buy it for the purpose of building a market place and for parking purposes. You can not blame them. It is a dead stream with weeds along its banks, and is used principally for the reception of tin cans and dead cats. It is an eyesore, a breeder of disease, a detriment to the community, and if the Federal Government owns that canal I think it ought to determine what should be done with it or dispose of it some way. There should be a survey made to ascertain the value of this property and the cost of rebuilding the same. If it is not the most feasible canal then they should sell the property so that the people there can use it for agricultural purposes, for sewers, for boulevards, and for buildings, etc.

Senator WADSWORTH. You are interested in the New York canal proposition? I want to read this. It shows the value of waterways. This is the report of the superintendent of public works on the canals of the State of New York for the year 1919. On pages 18 and 19 I find the following [reading]:

During the 1919 season of navigation, under somewhat unfavorable conditions in that the type of boats used were not designed for barge canal navigation, conclusive evidence of the abnormally low cost of transportation on the improved canals was revealed. A steamer and consort carrying cargo from New York to Buffalo accomplished the trip in a little more than four days at an operating cost of but 1.21 mills per ton-mile or about 45 cents per ton. The cargo carried paid a rate of \$1.50 per ton. Thus the net earning for the trip was more than \$1 per ton. Measured in terms of grain such operating costs would yield a basis of less than 1.5 cents per bushel of wheat. The wheat rate at present is 9.7 cents per bushel, showing even a greater percentage of profit on the grain traffic.

I think the distance along that canal from Buffalo to New York is probably 500 miles. One and a half cents per bushel for wheat—that seems to be the actual cost. We are paying 32 cents to deliver our wheat at New York. It is either 32 or 34 cents, I think, but I am not sure of that. The farmer in our section is receiving only about one-half, in a great many cases, for his hay what the railroad is receiving for hauling it to market. Really we need cheaper transporta-

tion, and as to the other, I am not sure whether it is 32 cents a bushel or 32 cents a hundred pounds.

Senator SPENCER. If it is 32 at all, it must be 32 cents a hundred pounds.

Mr. WELTY. I will look that up.

STATEMENT OF MR. ALBERT KRELL, PRESIDENT OF THE CENTRAL INLAND WATERWAYS ASSOCIATION.

Mr. KRELL. I want to say that about \$17,000,000 of terminal projects are held up until this canal question is settled. I am in the piano business. In selling my line of goods it takes about 10 days to 2 weeks to get a piano to Toledo, which ought to take only 3 or 4 days. We are only about 50 per cent normal. Suppose we get back into normal conditions, the railroads will not be able to take care of the commerce; but now we are growing smaller, our business is growing smaller instead of larger.

Senator WADSWORTH. Why do you not use the canal that you have there?

Mr. KRELL. The canal is all out. The flood in 1913 destroyed all the locks, and since that time the canal has not been used.

Senator WADSWORTH. As a matter of fact, it was not running profitably, was it?

Mr. KRELL. Very profitably. I was interested in both lines, Cincinnati and Dayton, and I know how very, very profitable it was. But they took the funds that were used for making repairs, etc., and put them into the general funds of the State of Ohio, and when they wanted some money to repair the canal there was no money there.

Senator LENROOT. Why did not the State repair it?

Mr. KRELL. Because it said there was no canal, and it would not repair it.

Senator WADSWORTH. Why did not the legislature make an appropriation to repair it?

Mr. KRELL. Simply the railroads were against it.

Senator FLETCHER. It could be repaired, could it?

Mr. KRELL. No; it is too small—too antiquated. It is only 4 feet deep, and a 12-foot barge canal is necessary to carry the commerce. You should have not less than 1,500 or 2,000 ton barges, and the canal should be 12 feet deep, like the barge canal of New York. That is the kind of canal that will relieve transportation conditions and help us.

Senator WADSWORTH. I am not going to ask you this question in a hostile spirit at all, but I notice that the State of New York built her own barge canal. Has the State of Ohio ever thought of doing that?

Mr. KRELL. No; I do not think they have ever thought of it. I will tell you why they would not. You see, New York State has only one canal. We have three to contend with. If one of the three were selected, possibly the others might object. As long as there is that feeling of jealousy between the three sections of the State it could not be done. It is a national proposition and ought to be built by the United States Government, and, in fact, if the canal is United States Government property it is more so than ever before.

Representative THOMPSON. I would simply interject this thought here. If you get these surveys it leaves the way open to private enterprise later on to build these canals.

Mr. KRELL. I want to say, Mr. Chairman, that I am president of the waterways association of Cincinnati, and for four years we have been trying to get this survey through, and it is absolutely necessary for our future protection. Cincinnati and that great Miami Valley and the Maumee Valley need to have that survey done as soon as possible so that we can know where we stand. The manufacturers of Cincinnati are ready to move out of there unless we get waterways. We are discriminated against in freight rates and every other way. We can not deliver goods. We are so discriminated against in freight rates that we can not exist. That is the condition of that great valley.

Mr. WELTY. I think, in answer to the chairman's question, we realize that New York has built her own canal; but in Ohio there is at least the question of title to the Miami & Erie Canal.

Now, if the Federal Government will release that property to the State of Ohio, we might think about it; but there is no use thinking about it if the State is only a trustee of that property for the Federal Government.

As I say, Kentucky is vitally interested in this, and so is Minnesota and so is Wisconsin. They want cheaper coal up there.

Senator WADSWORTH. Are there any questions to be asked? We are much obliged to you.

Representative THOMPSON. I wish to thank the chairman and the committee for the courtesy of this hearing.

(Thereupon, at 3.45 o'clock p. m., the subcommittee adjourned until Monday, April 24, 1922, at 10.30 o'clock a. m.)

WAR DEPARTMENT APPROPRIATION BILL, 1923.

MONDAY, APRIL 24, 1922.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10 o'clock a. m.

Present: Senators Wadsworth (chairman), Jones of Washington, Spencer, and Harris.

The CHAIRMAN (Senator Wadsworth). Gentlemen, some women's organizations have requested permission to appear before the committee this morning and give us the benefit of their views concerning the Army and kindred topics touched upon by this bill. We shall be glad to hear them.

STATEMENT OF MRS. B. L. ROBINSON, OF CAMBRIDGE, MASS., PRESIDENT PUBLIC INTERESTS LEAGUE OF MASSACHUSETTS.

ADEQUATE PROVISION FOR THE ARMY.

Mrs. ROBINSON. Mr. Chairman, I should like to say just a word about the history of our league. We were the first organization in New England, if not in the United States, to respond to President Wilson's call for help to the Red Cross in 1914; and for 16 months, until the Massachusetts Red Cross could assemble all its departments under one head, we supplied headquarters very largely for a thousand volunteer workers, all the materials needed, and every cent of money, so that the Red Cross did not have 1 cent of expense in 16 weeks.

The Massachusetts Public Interests League has asked me to present this statement to you:

The Massachusetts Public Interests League wishes to go on record as strongly opposed to the renewed attempts of women pacifists to render our country helpless before attack. Bolshevik Russia, with its starving millions who look to us for food, supports an army of 2,000,000 soldiers. The women pacifists who wish to reduce our armament beyond reason, being themselves internationalists, have no word of censure for Trotzky's militarism. Let them undertake to persuade Russia to disarm as a proof of their sincerity before placing this country at the mercy of warlike nations, as they attempted to do during the Great War.

I have here an article written by the secretary of the Massachusetts Aero Club, which was recently approached by these same ladies who want us generally to disarm, asking to send a speaker on disarma-

ment to the Aero Club. Mr. A. K. Warren, jr., who is a member of the American Legion and secretary of this club, replied in these words:

Those of us who were in the service during the war, who saw splendid young American boys go to their deaths on the battlefields of France—rushed into battle and killed before there was opportunity to train them sufficiently well to give them an equal chance against their enemy, victims of national unpreparedness—can not consider for a moment that your organization is one which is competent to determine the military policy of this great country of ours. From the list of members and from the list of speakers which you have furnished us we find no names of any men or women who are competent by their experience and their studies to qualify as experts in the consideration of military matters or of the measures which it is necessary to take in order to secure to us a preparedness that will insure the young men of our country a fair chance for their lives if they are again drafted for war.

Many of our members have heard of the activities of some of the members of your organization who, as members of other organizations such as the Woman's Peace Party, Emergency Peace Federation, American Union Against Militarism, American Civil Liberties Union, and the Socialist Party, were associated with radicals and Socialists as advocates of "peace at any price" in an effort to prevent this Nation from fighting even after it had entered the war.

Our members generally realize that the United States was kept weak and unprepared in the past by the efforts of just such organizations as yours, and that it was this weakness and this unpreparedness that encouraged the attack by the Central Powers and forced us into the war. They feel that such organizations are largely responsible for the murder of so many of our young men (because they were untrained) and for the tremendously excessive and exorbitant cost of the prosecution of the war to which our country was subjected.

The Aero Club stands for the safety and welfare of the institutions of free America. It has no use for pacifists, socialists, or radicalists who are endeavoring to internationalize our country.

The Massachusetts Public Interests League stands with the men who have fought for their country in this view, and we wish to call attention to the fact that it was when the war clouds were gathering most thickly in this country that these women pacifists were most active; and now that again the war clouds seem to be gathering over Europe, they are now doing everything in their power to undermine our country while doing nothing to undermine the power of the countries which would be first to attack us.

**STATEMENT OF MRS. RUFUS M. GIBBS, OF BALTIMORE, MD.,
SECRETARY OF THE MARYLAND WOMEN'S CONSTITUTIONAL
LEAGUE.**

Mrs. GIBBS. I am secretary of the Women's Constitutional League of Maryland. We have organized together, and our women have gone into politics, and we feel that we want to stand together for the patriotic causes in this country.

This association has passed the following resolutions:

Whereas we recognize that the men and women of this Nation have identical interests; and

Whereas we know that an adequate Army is necessary to protect those interests: Therefore,

We resolve to urge that you disregard all appeals of pacifists, socialists, and internationalists who desire to see America defenseless and want to re-

duce our Army below reasonable proportions, and that you consider the question of national defense only from the standpoint of safety and welfare for our country.

I feel that this is a very, very important time. You gentlemen probably do not realize as we do the disintegrating effect that women have had in coming into politics. There is a group that have apparently the most unsound ideas, and we find that they are using tremendous influence and getting all kinds of results everywhere. It is a mode of warfare that is undermining all our institutions. In the past we have seen what the pacifists were doing; and I want to quote what Roosevelt said. I feel that he was a patriot and a prophet, and we can all listen to him, though he is not with us. These same women that he referred to have now been augmented by these groups of unsound women, and they are leaving no stone unturned to disintegrate our entire system of protection.

Roosevelt said, in a letter written Prof. Samuel T. Dutton, of Columbia University, secretary for the Armenian and Syrian Relief:

The professional pacifists of the United States represent what has been on the whole the most evil influence at work in the United States in the last 50 years. These men, whether politicians, publicists, college presidents, labor leaders, or self-styled philanthropists, have done everything they could to relax the fiber of the American character and weaken the American will.

Let us realize that the words of the weakling and the coward, of the pacifist and the poltroon, are worthless to stop wrongdoing. Wrongdoing will only be stopped by men who are brave as well as just, who put honor above safety, who are true to a lofty ideal of duty, who prepare in advance to make their strength effective, and who shrink from no hazard—not even the final hazard of war, if necessary—in order to serve the great cause of righteousness. When our people take this stand we will also be able effectively to take a stand in international matters which will prevent such cataclysms of wrong as have been witnessed.

I am a widow and I have one boy, and that boy has been raised to be a soldier when this country needs him. He is never going to be "too proud to fight"; and all I ask of you gentlemen is that if he ever does have to fight he will fight under the fair conditions that should be guaranteed to him by the men who control our Government. He should have a chance, just as every other American boy should have a chance, to go into camps that are supervised by the very best type of men we have in this country. He should have everything that is necessary to protect him in doing what he can for his country, just as all the other American boys should. We who have been close to the war and who have been close to these camps—and in Maryland we had a great many of them around us—were horrified by the inefficiency that was displayed. If you make the Army the refuge for the inefficient and you get into it these men that are useless in every other walk of life and do not have high ideals and do not recognize that their high calling is to protect above all the women and children of this country, you are not doing your duty.

I recognize that this committee is undoubtedly a very sound committee. I think the men have shown that they want to do whatever is the right thing; but you will not only have to desire that sort of thing, but you must be aggressive. It is a time to be aggressive. All you have to do is to see what has happened in the House, and to see how these men go down before the onslaughts of some of these wild

people, who believe everything that is told them and wield the most tremendous influence.

I ask you, gentlemen, everyone of this committee, to be aggressive for the right kind of an Army, and support the right kind of men, so that we will have the efficient sort of men that will take care of this great country of ours. Do not let us have an ignominious Army that will be like one policeman for New York City. Do not let us have a limited Army. It was ridiculous to think that practically our whole Army would have gone into the Yale bowl, almost, before we went into the war. Let us have it on the right basis.

You men who know that insurance is a vital thing will never be satisfied with the kind of insurance that an ignoble sort of an Army would give us. I appeal to you in the name of the real women of this country, who are not pacifists. They are not Socialists. They are not internationalists. They are as sound as the men, but they can not leave their homes. They can not come here to plead with you men. Do not listen to those that have a "watch tower" in Washington and are trying to govern this country. Government is a man's job, and the women of this country believe that you are capable of governing us in the way that we want to be governed.

**STATEMENT OF MRS. LEO FALLON, CHAIRMAN OF THE WOMEN'S
TWENTIETH WARD DEMOCRATIC CLUB OF MARYLAND.**

Mrs. FALLON. Mr. Chairman, when we started we had about 75 women who were opposed to voting in that club. It has increased now to about 150. When we had our first meeting—when there were 75 women organized—we had among us 276 children, and a good many of those children were boys. I am wondering how many boys these pacifists have, these women who are coming here and asking you gentlemen to reduce this appropriation.

It is really tragic to think that we who ordinarily stay at home have to come here for a purpose like this. I had to leave my home and my family this morning to come over here and tell you, whom we send to Washington to represent us, what we want. We had a meeting on Friday night regarding this hearing, and I think every one of those women was willing to leave her duties and her home and shoulder a gun and come over here and approach Washington, the Senators and Representatives, and tell them that we want our men to be prepared for war. We do not want war any more than anybody else does; but we want to be ready, and we are ready, and I represent women who are ready.

There are a number of organizations here, "scraps of paper," with about ten hundred million names on them. You go through those clubs, and what do you find? In our own city, for instance, they have a federation of women's clubs—102 clubs. I made it my special business to call up the legislative chairmen of some of those clubs, and they did not even know anything about the Sheppard-Towner maternity bill, the bill that represents the women, the mothers, of the State. They send a paper over here, and say, "We want it." Then, there is the parent-teachers' association. My father has been teaching school in Maryland for 50 years and never had heard of that except what he had seen in the paper. The bill had never been given to him. Are the men in Washington going to represent us like that?

Senator SPENCER. You are referring there to clubs that are opposed to a large army?

Mrs. FALLOM. They want all of these wild things. Why, a woman stood up in Baltimore just a few days ago and said, "We defy anyone to break up the lobby in Washington." We are going to break it up with our votes. We may not be able to break it up in Washington, but the women in Maryland are going to break up the lobby in Maryland.

Senator SPENCER. Let me see if I get you right. Those organizations that you refer to as not being familiar with women's legislation, like the maternity bill and others, are the organizations which I understand you to say are in favor of a very small army?

Mrs. FALLOM. Yes; the ones that want a small army; that want all of this wild women's legislation.

Senator SPENCER. And that is a position which you do not take?

Mrs. FALLOM. I do not. I stand with the men, absolutely, but I want the men to awaken to the fact that these women do not represent us. Why, the women who called that meeting together made a tremendous noise in Baltimore, but they have less than 50 women that are meeting in the whole State of Maryland, and in my district they have 12 women, and then they write to the Congressmen telling them what we want! We will tell them what we want.

Thank you, gentlemen.

STATEMENT OF MISS M. G. KILBRETH, OF SOUTHAMPTON, N. Y.

Miss KILBRETH. Mr. Chairman and members of the committee: I want to ask you not to be deceived by this cry for a reduction of the Army. These women who cry for a small Army do so not because they love peace so much, but because they love communism more.

It is impossible, in the time at our disposal, to give you the documents and references that we have on this subject—the absolute proof that this movement is communistic. The Navy Department has those data; the Department of Justice has them; and I should be very glad, indeed, if it were possible, to give you some of this material privately. It is impossible to make it all public.

First of all, I want to speak to you about the slacker oath. I understand that the purpose of our being here is this: We feel that the men should handle the military situation. It is the men who fight the wars, and we feel that they should handle it. The only thing is that at present some people have gotten in the habit of looking on women as noncombatants. In the actual warfare at the present moment, in the warfare of peace—that is, the propaganda warfare—it is the women that are the chief fighters. Women are far abler at that warfare than men, and it is women that are handling this propaganda situation now.

Please do not consider women as noncombatants. It is the propaganda warfare that I want to speak of, please.

I understand—I saw by the newspapers, they being my source of information—that certain women spoke here two or three days ago. One of them was Miss Winsor. I want to draw attention to the slacker oaths. They are illuminating. This Miss Winsor was one

of the prominent women at the Women's Third Internationale, held at Vienna July, 1921. These are the official documents. In the Women's Third Internationale Miss Winsor, who spoke here, I understand from the newspapers, the other day, was the author of the famous nonresistance vow or oath. This is it. It gets worse as it goes on. Miss Winsor said:

Whereas, we believe that wars will never cease until human life is held sacred and inviolable, be it hereby

Resolved, That we adopt the principle and practice of nonresistance under all circumstances.

That was passed. However, there was another slacker vow passed.

Senator SPENCER. That was passed by what body?

Miss KILBRETH. By the Women's International League for Peace and Freedom. It now has its headquarters right here under our very noses in Washington, at the corner of Fourteenth and H Streets. This is their official report, from Vienna.

Senator SPENCER. And that was passed at the Vienna congress?

Miss KILBRETH. At the Vienna congress, July, 1921. I will show you these; I will leave them with you, if the members of the committee care for them. Now, this is "Pacifism in Practice." They had all sorts of names.

"Individual Opposition to War." This is the vow:

This congress expressly declares that it abides by resolution 37 of the Zurich congress—

I want to read you that, too, in a minute, gentlemen. These women are all internationalists. They absolutely break down the national lines—not only the State lines here but the national lines.

This International Congress of Women, recognizing that a strike of women against war of all kinds can only be effective if taken up internationally, urges the national sections to work for an international agreement between women to refuse their support of war in money, work, or propaganda.

That was carried with a tremendous ovation.

This oath is very important, because it shows that they are trying to put these oaths into a form that will make it possible for these people to claim to be conscientious objectors. It is very subtle. I am coming to one that is not subtle in a minute, but these were subtle. That was the purpose of all these resolutions. Resolution 37 of the Zurich Women's International Congress of May, 1919, to which reference was made, was by Miss Emily Balch, of Massachusetts, who is, after Miss Addams and Mrs. Catt, the most powerful internationalist. I think, probably, in Europe. She is their international secretary, and she spoke at the mass meeting here in Washington last December at which Miss Addams presided.

At the Zurich meeting in May, 1919, the official report states:

Emily Balch stood and, raising her hand, invited all present to join her in pledging themselves to do everything in their power toward the ending of war and the coming of permanent peace.

And the heading is:

INTERNATIONAL RESISTANCE OF WOMEN TO WAR.

The whole assembly rose and pledged themselves.
Yella Hertzka moved—

She is the great Austrian pacifist who was conspicuous in Vienna at the 1921 meeting—

Yella Hertzka moved, seconded by Madeleine Doty, the following resolution: "The International Congress resolves that the national sections be urged, in case of the threat or the declaration of war, to organize women to refuse their support in money, work, or propaganda."

Senator SPENCER. That is not complete, is it? It says "be urged"—

Miss KILBRETH. It goes on in a minute. I will read you another. This was the first one of these things, in which they were rather feeling their way. Other women got up and spoke.

Anna Klemann (she is a German) said:

Our position must be the position of conscientious objectors concerning all work aiming to destroy life. I urgently ask the Congress to accept Frau Hertzka's motion.

Now, here is the amendment. This amendment was moved and was finally voted:

Martha Larsen, from Norway, moved the following amendment: "This International Congress of Women recognizes that a strike of women against all kinds of war can only be effective if taken up internationally. This congress therefore urges the national sections to take up work for an international agreement between women to refuse their support of war in money, work, or propaganda."

That is the one that was eventually taken up and passed. I will file these documents, if you care to look at them.

Here is another vow by Miss Harriet Connor Brown, who spoke before you the other day. She was a member of the committee on international relations at the Vienna congress. This is in the popular form of the slacker oath that the people can understand.

Senator SPENCER. This is a copy of a pamphlet which you have in your hand by Miss Brown, circulated by the Women's International League for Peace and Freedom?

Miss KILBRETH. These are all official publications.

Senator SPENCER. Tell the stenographer what it is.

Miss KILBRETH. I will file them all if you want to see them. Miss Brown says this is what the women are going to say to congresses and parliaments:

Go to war if you want to, but know this: We have pledged ourselves not to give you our children, not to encourage or nurse your soldiers, not to knit a sock or roll a bandage, or drive a truck, or make a war speech, or buy a bond, etc.

Then she goes on with her political threat, what they are going to do to men who do not do what they demand. The political threats loom very large indeed. That is one of the women who spoke to you the other day. They were among the active internationalists.

Here is another vow. This was given me by a general in the Army the other day. It is also in the hands of the Navy Department. This is from Sara Bard Field. Sara Bard Field was one of the ablest of the field secretaries and campaigners of the Women's National Party, which has its "watchtower" here to watch you gentlemen.

This was written on February 22, 1922:

I have no confidence in anything short of revolution, peaceful by all means, if possible, bloody if necessary, in every land, resulting in the establishment of the communistic idea in some form, to do away with war.

There is proof of the communistic intention.

Gentlemen, there is no intention whatever of saving this money by reducing the Army. That is not the purpose. The purpose is to divert this money into bureaucratic channels for new bills. One of these bills has already been passed—the maternity bill. The other one, the educational bill, is coming on. There is not time for me to touch on that; but in all these international conferences, and in this women's third internationale that is now going on in Baltimore—because that is absolutely what it is—they propose to take up with the women of South America, as they took up in these two other conferences, in Zurich and Vienna—you will find it all here in most startling form—the establishment of an international educational system. That is what they want to do. They intend to print the textbooks and handle them in such a way that education will be poisoned at its source. Here is their outline for international control of education, which I should like to file. We believe the pending Sterling-Towner bill will enable radical women to capture our educational system and that it will provide the requisite channel for revolution and propaganda outlined at these congresses. It is being pushed as much as they have the force to push it.

I want to show you that it is not proposed to save the money from curtailing the Army and Navy.

This is from the official organ of the National Women's Party, that has a "watchtower" here. This is the number of November, 1920. It says:

The United States can well afford to invest the needed billions in the establishment of motherhood upon a sound basis.

This refers apparently to the Sheppard-Towner maternity bill one of the two bills that you are asked to scrap the Army and the Navy to supply funds for.

At present less than 1 per cent of the Nation's public funds is devoted to work for women and children, education, research, and public health. More than five billions is spent yearly in connection with organized killing—that is, for recent and past wars, for the Navy and War Departments.

It continues:

Women are not wanting who will heretically maintain that these proportions might be reversed with benefit to the Nation.

Now, here is Miss Paul's statement. She was at that time the chairman of that organization. She says:

We intend to insist also that the State assume entire responsibility for the maintenance and education of children until they become of age.

When the women of the world have junked the battleships and other impedimenta of wars, enough money will be released to take care of these reforms.

There is no question that you are not expected to save. There is not any purpose of saving money for the taxpayers of the country in all this. The greatest propaganda in the world for reducing the Army and the Navy is the propaganda of women. It is the most wide-spread, and it is the most sinister; and they are bringing

these dangerous foreign women over to this country. Frau Schwimmer, who is the woman who organized practically all the peace societies to hamper our preparedness, is here. Frau Schwimmer has been here for months in Chicago. She is a very able woman. She is the woman in whose rooms, in New York—I think it was Mr. Archibald Stevenson of New York who made the statement before the Overman committee—that it was in her rooms that the Russian delegates who came over here for munitions were first corrupted by the German ambassador.

Senator SPENCER. Was not she one of the leading forces in the Ford peace ship?

Miss KILERETH. Oh, she was the woman who organized the whole thing. She made us perfectly ridiculous.

Raymond Robins' testimony before the Overman committee explained what a great part women played in the Russian revolution. They were the chief propagandists that handled the Russian revolution. This woman, Alexandra Kolontay, was the key woman of the Russian revolution. She was the wife of an artillery officer in the Russian Army. Before the revolution she came under the influence of Lenin. She was one of his chief tools and was made head of the welfare department. She was the woman that broke the Russian Army sovietizing the nurses. She got the nurses and the hospitals. That was where the first break in Russia came. The women abandoned the hospitals.

The nurses were distributed throughout the Army, and it was those nurses who told the soldiers that the land was being distributed, and unless they went back they would not get any of the land. That was what caused the first stampede in the Russian Army. It was that woman's work as commissar of public welfare. That was indorsed by the Children's Bureau here of the Labor Department. I learned yesterday that Madame Kolontay has been twice here in America.

I ask you to ignore these sinister international pacifist organizations that are demanding the reduction of our forces of defense.

NATIONAL COUNCIL FOR REDUCTION OF ARMAMENTS,
Washington, D. C., April 26, 1922.

Senator JAMES W. WADSWORTH, JR.,
United States Senate, Washington, D. C.

MY DEAR SENATOR WADSWORTH: On last Monday one of the women who addressed your committee referred in condemnatory terms to the National Council for Reduction of Armaments, apparently classifying it as a radical or socialistic organization. The reference was wholly uncalled for and absolutely misapplied. The custom has become altogether too frequent in certain quarters of branding all who may hold contrary opinions as bolshevistic, whether there be any foundation for it or not.

In view of the reference above cited I desire to submit through you to the Appropriations Committee now considering the Army appropriation bill the following statement on behalf of the National Council for Reduction of Armaments and its working staff.

We believe in orderly government and its administration through the constituted orderly processes of law. In the position which we advocate we are supported by tens of thousands of the best and most substantial citizens, both men and women, in comparison with whom the really socialistic elements of our country are a mere bagatelle.

We supported the administration in its call for the recent International Conference on the Limitation of Armament, and all its treaties which came from that body and were recently ratified by the Senate. We rejoice in common with

all good citizens in the better understanding that has come to the nations as the result of this conference and the more pronounced feeling of good will that now seems to exist between the United States and the rest of the world.

The primary object of the national council is, through its literature and its campaigns of education, to help in promoting still further this feeling of better international understanding and good will as the more certain guaranties of permanent peace. We will always be giving the most hearty support to the administration and to Congress in all steps that are taken that mark a progressive path toward the attainment of these high ideals. If at any time we find that we are unable to agree in judgment with the administration or Congress upon questions of public policy, we ask that our position be not construed as one in opposition to the Government, but one upon which we will always be ready to confer with governmental representatives in the belief that in a multitude of counsel there is safety and that sooner or later the best policies which are for the good of all will prevail.

The position which we advocated before your committee last week, suggesting that the country should get back again to a pre-war basis in time of peace, which has been further safeguarded by the recent Washington conference, is the direct result of our fundamental desire to promote an era of better world understanding. Both for economical reasons and in order that the United States may not be an occasion of continued suspicion on the part of other nations because of the maintenance of an unnecessarily large military equipment, we have believed that an Army approaching the pre-war basis would serve a better purpose than a larger Army, the purpose of maintaining which would be misunderstood by certain other nations.

At no time, however, have we advocated an abandonment of either the Army or Navy, but in the interests of national economy and of more surely allaying suspicion on the part of other peoples, we have advocated a progressive reduction of both the Army and Navy within the limits of safety to an adequate police basis.

In view of the reflections made upon the national council at the hearing on Monday and referred to above, we would appreciate it if this letter could be incorporated in the hearings.

Very cordially yours,

S. E. NICHOLSON,
Associate Secretary.

STATEMENT OF BRIG. GEN. J. M. CARSON, ASSISTANT QUARTER-MASTER GENERAL AND CHIEF OF CONSTRUCTION SERVICE.

BARRACKS AND QUARTERS—WATER AND SEWERS.

Senator WADSWORTH. To what items in the bill do you wish to call attention?

General CARSON. The first matter is in connection with a request to utilize a certain portion of the appropriation for "Barracks and quarters" pertaining to this fiscal year for expenditure under "Water and sewers" for the same fiscal year. No additional money is asked for; merely authority to utilize money which, under existing legislation, can be applied only to what we call barracks and quarters, for necessary improvements to our water and sewer systems.

The two appropriations, owing to this restriction, have become unbalanced. That is, we have sufficient for "Barracks and quarters" and insufficient for "Water and sewers;" and under the legislation we can not make up the deficiency in "Water and sewers" by using these funds pertaining to "Barracks and quarters."

Senator SPENCER. Where is that restriction?

General CARSON. In the amount of money.

Senator SPENCER. Oh, I thought it was a legislative restriction. Is this the item, \$2,982,638?

General CARSON. That is the item for next year. I want the amount appropriated.

Senator SPENCER. For the present year you have \$6,860,000.

General CARSON. We are limited to that. We can not expend any more for repairs and maintenance of buildings under that appropriation. "Water and sewers" is limited to \$2,000,000 for the current year. We have sufficient under the \$6,000,000 for "Barracks and quarters" for our purposes, but we have a lack of money under "Water and sewers." In other words, our obligations under that head will exceed the total of \$2,000,000 for the year.

Senator JONES of Washington. You want authority to be able to transfer from one fund to the other?

General CARSON. That is all, sir.

Senator JONES of Washington. That means a good deal.

Senator WADSWORTH. That authority always was inserted in the Army appropriation bill until this last bill was passed for the current year, when it was not granted except in the item of transportation, which was permitted to be reinforced from savings from some other items; but that was the only one.

General CARSON. In explaining the estimates last year for the appropriations of this year, we urged then that the amount allotted in the bill as presented by the House Committee on Appropriations would be insufficient. We asked for more money, but they thought \$2,000,000 would be sufficient; and our predictions have rather been verified.

Senator JONES of Washington. Have you tried to get along with the \$2,000,000?

General CARSON. Absolutely, sir.

Senator JONES of Washington. You have curtailed everywhere you possibly could?

General CARSON. In every possible way, even to the point where the people at the stations are protesting against a lack of water and the condition of the water and sewer systems. They have been unable to make necessary current repairs, with the result that these systems are reported as more or less in bad condition. That means waste, particularly in water systems. We are losing water, and we are not making repairs.

Senator WADSWORTH. We have a letter addressed to Senator Warren, chairman of the committee, under date of April 11, by the Secretary of War, in which he suggests that this paragraph be inserted in the bill at the appropriate place:

Not to exceed \$530,000 of the funds appropriated for "Barracks and quarters, 1922," in the act entitled "An act making appropriations," etc., shall become immediately available, and shall remain available until June 30, 1923, for such purposes as are authorized in the appropriation for water and sewers at military posts for the fiscal year 1922: *Provided*, That the restriction as to new construction contained in the Army appropriation act, fiscal year 1922, shall not apply to the expenditure of this sum.

Please remind us, General, what that restriction was in the current appropriation bill.

LIMITATION ON NEW CONSTRUCTION.

General CARSON. It was to the effect that not more than \$10,000 of this amount should be expended for new construction; and that has

been interpreted to mean that the total amount shall not exceed \$10,000. That is in the current appropriation bill.

Senator WADSWORTH. I suppose the interpretation of the phrase "new construction," if made narrow, would result in a very severe restriction. Is that your idea?

General CARSON. Yes, sir; it would.

Senator WADSWORTH. This same proviso appears in the pending bill.

General CARSON. Yes, sir. I spoke of that at the hearing about a week or 10 days ago, asking that it be increased.

Senator WADSWORTH. Describe to the committee how that handicaps you.

General CARSON. I can probably best do so by describing some of the items that we are considering under this \$530,000, if it is granted. Will that be sufficient, sir—some of the items described?

For instance, at Fort Reno, Okla., which is one of our permanent stations, they have urged very strongly improvements to the water-supply system amounting to \$8,500. The report that comes to us, which we have verified to our satisfaction, is that the entire water-works system at the post is in a bad state of repair. We have inserted this project in the estimates for the past four or five years, but on each occasion it has been disapproved. The quartermaster reports that the depot is worrying along, trying to make the best of existing conditions, and laboring under constant fear of being left entirely without water at any time. There is only one pump in working order, and this pump frequently gets out of order, leaving the post without a semblance of fire protection until repairs are made. Also, a portion of the wells occasionally get stopped up, which adds to the seriousness of the situation. The only two fires which have occurred at Fort Reno within the past few years caused a total loss on account of inadequate fire protection. The funds referred to represent the minimum amount required to accomplish repairs absolutely necessary to insure continued operation of the system.

Here is one from the Presidio of San Francisco: Replacing worn-out pumping unit, \$5,600. The two pumping units installed at the Presidio of San Francisco pumping station are in an exceedingly bad state of repair. Recent correspondence shows that no extensive repairs have been made to the equipment in question within the past 10 years; and as a consequence, due to continuous operation, the bearings and fittings have become worn to such extent as to make either extensive repairs or replacements with new equipment absolutely necessary. Experts who have examined these pumps and engines state that a breakdown is imminent. Such an occurrence would not only result in a complete discontinuance of water now furnished from Government sources to the Presidio, Letterman General Hospital, Fort Winfield Scott, Crissy Field, Fort Mason (including the transport docks, transport, and harbor boats), Alcatraz, and Fort McDowell, but would result in insufficient pressure to the valuable buildings at Presidio Infantry Terrace and Fort Winfield Scott, and these areas would be entirely without fire protection as well as without domestic water supply.

Senator JONES of Washington. Give us some examples of the new construction contemplated.

General CARSON. These are mostly replacements that I refer to.

Senator WADSWORTH. Is the replacement of a worn-out pump regarded as new construction?

General CARSON. No, sir; we do not regard it as new construction work.

Senator WADSWORTH. I suppose you would regard as new construction work the extension of an existing main to another building?

General CARSON. Yes; any extension of it. Of course, these items that I have been reading to you are more in the nature of replacements; but we have not even enough money to do these things, and that is why I am asking for this authority to utilize funds that we can spare from "Barracks and quarters" for this work under "Water and sewers."

Senator JONES of Washington. I understand that you want this \$10,000 limitation done away with.

General CARSON. That was in a previous hearing. At the present moment all we ask is for authority to utilize money that we can spare from "Barracks and quarters" to make these necessary repairs under "Water and sewers," for which we have no money.

Senator JONES of Washington. You have not anything there to cite, then, as new construction?

General CARSON. No, sir; this is mostly replacement. Yes; there are some. Here are some of the new items:

Edgewood Arsenal: Alterations and remodeling, \$15,000. This is to utilize available buildings and facilities at Edgewood Arsenal to house additional troops in order to provide sufficient officers' quarters and make a few needed changes in the barracks. This is in line with the desire of the War Department to utilize existing accommodations and get rid of the temporary accommodations in camps. That is just one item.

Fort Snelling, Minn.: Plumbing for officers' quarters, \$925. That is a small amount, but it is new work.

San Antonio, Tex.: Replacement of wooden water mains, \$11,792. The wooden water mains in the remount area at San Antonio are giving considerable trouble, causing a waste which could be eliminated by replacing the wooden water mains with cast-iron mains. That has been going on for some time.

Langley field: Fire-alarm system. It is considered necessary to extend the fire-alarm system at Langley Field, as pointed out in the proceedings of a board of officers recently convened to investigate a fire at that station. The local authorities desire installations to cost \$15,000, but we thought that suitable protection and installation could be effected for \$2,500.

Fort McIntosh: Sewage disposal, \$25,000. Sewage from this post is being dumped untreated into the river. This is a violation of certain laws of the State of Texas, and it is proposed to provide a suitable sewage-treatment plan at an estimated cost of \$25,000.

Those are some of the items under "New construction." The others are largely replacement and improvements. It is not that we have a surplus in "Barracks and quarters," but simply that we regard these items that would come under "Water and sewers" as of greater importance and necessity. We would have to postpone or suspend something that we would have done under the appropri-

tion for "Barracks and quarters" in order to attend to these more pressing repairs, replacements, etc.

Senator WADSWORTH. It is exceedingly difficult to keep these items separate in a practical sense; is it not? For example, under "Barracks and quarters" you are permitted to repair a building as to its roof, or its foundation, or its floors, or its walls, or to paint it; but you can not do a thing in repairing the plumbing under that heading?

General CARSON. No, sir; nor the heating, nor electric light.

Senator WADSWORTH. You can send a painter into the bathroom, for example, to paint the bathroom, but he must not touch the plumbing, and the plumber must not touch the painting?

General CARSON. No, sir; not as long as we know anything about it. He is not supposed to do it, and he does not, really. They watch that very carefully.

Senator WADSWORTH. It seems to me that these two things are inseparable. A house is no good at all, a barrack is no good at all, unless the water is going to it and distributed through it.

General CARSON. That is precisely the situation, Senator Wadsworth.

Senator WADSWORTH. I suppose there was a good reason for it originally, but I am wondering if the reason still stands. I am wondering why these two items are kept separate in the bill. It seems to me from the practical standpoint that they are so inseparable in the matter of administration, at least, that they might well be put together in the bill. It would not cost any more money to the Government one way or the other; but it would relieve the department of these tiny little distinctions as to what is "Barracks and quarters" and what is "Water and sewers."

Senator JONES of Washington. I agree with you absolutely.

General CARSON. It always has been an embarrassment; and in my own experience, going over twenty-odd years, that distinction has been made. How it originated I am not able to say absolutely, but my impression has been that it was because the committees of Congress desired a detailed statement of what the money was to be used for, and it has become a matter of practice, I might say, so to separate the items in the bill. At one time, I believe, we were authorized to regard these appropriations as one fund.

Senator WADSWORTH. You were until last year.

General CARSON. Yes, sir; but for some reason that I am unable to explain fully that authority was eliminated, and we were put back on the old status, and it does cause us embarrassment. There was no objection at all to specifying, if the committees of Congress so desired, how much we anticipated spending under each heading; but it is really impossible to predict in the summer, for example, when our estimates are made up, what would be required under these different heads for the fiscal year following. That is, in the summer of 1921 we had to prepare our estimates for the money to be used for the fiscal year beginning July 1, 1922. We can estimate what will be required, it is true, based upon past experience, but extraordinary things happen that we can not estimate.

For instance, as an illustration of that, we had a railroad trestle and a wagon bridge crossing Upatoi Creek at Fort Benning. Floods have occurred there in the past year on two occasions, in which the

bridge has been damaged. It was not a permanent bridge to start with. Recently a flood washed out nearly 200 feet of the trestle, so that the post was absolutely cut off from Columbus, except by a 15-mile detour. Those are things that we can not anticipate. Of course, that does not apply to this particular appropriation.

Senator WADSWORTH. I suppose that would come under "Roads and walks"?

General CARSON. Under "Roads, walks, wharves, and drainage"; and we can not use any money available under "Barracks and quarters" under the law.

Senator WADSWORTH. I can see how you could distinguish without great difficulty between "Roads and walks" and "Barracks and quarters" on the one side, but I do not see how you could distinguish between "Barracks and quarters" and "Water and sewers" on the other side.

General CARSON. In a building, as you say, "Barracks and quarters" applies to the construction proper. "Water and sewers" takes care of the plumbing; that is, the water supply and the sewage disposal. "Regular supplies" has to take care of the electrical work and lighting fixtures, the lighting system, and the heating system.

Senator WADSWORTH. When you erect a barrack, you delve into three appropriations at least?

General CARSON. Yes, sir; unless we can get a special appropriation for the construction of a barrack at so much money, and that is interpreted as being the building complete. It is a new building. The barrack might cost \$100,000, for example, and a special appropriation is given of \$100,000 for one barrack at a certain place. That, the law officers of the Government have held, I believe, constitutes such authority that we can use that fund for everything; but when we come to use it from current appropriations we are held strictly to the limitation.

Senator WADSWORTH. Speaking of "Barracks and quarters," General, I suppose there was a good reason for it originally, but what was accomplished by and what is the purpose of distinguishing barracks and quarters in continental United States and barracks and quarters in the Philippines? There are two separate appropriations for exactly the same purpose—the housing of American troops.

General CARSON. I can not recall the original reason for it, but my impression is that it was due to the fact that the committee desired a specific statement of how much money was desired for barracks and quarters in the insular possessions, and it has been placed at \$300,000 for some years past. At one time it was thought that this could be supplemented by allotment of funds from the other appropriations if they could be spared, but the law officers of the Government have decided that it can not be done, so that no matter what happens in the Philippine Islands we can not allot to it any money from the regular appropriation for "Barracks and quarters." Recently we have had two or three cyclones, and I meant to bring with me some illustrations of the damage done to buildings on Corregidor Island, but I have forgotten to do it; but the damage was done there. Roofs have been damaged; some buildings have been entirely demolished. I spent three years on the island, and I know what a cyclone there means, so I can readily visualize the situation.

Although we have the money available under "Barracks and quarters," under the legal decisions we can not allot any of it to the Philippine Islands.

It must come out of the appropriations specifically for that purpose. Based upon our experiences, we endeavor to allow certain amounts for these contingencies, these unexpected casualties, you might call them, and we so frankly informed the committees. We will be unable to deal with them if that amount is reduced.

SEACOAST DEFENSES, PHILIPPINE ISLANDS AND HAWAII.

Senator WADSWORTH. Is there some other item to which you desire to draw attention?

General CARSON. Yes, sir; there is another. Under the bill for the current fiscal year there is an appropriation of \$75,000 for seacoast defenses, Philippine Islands and Hawaii.

Senator WADSWORTH. What page is that on?

Senator SPENCER. That is in the current bill.

General CARSON. It is in the current bill, sir.

Senator WADSWORTH. Never mind, then.

General CARSON. We should like to have that made available during the next fiscal year, owing to the fact that we were delayed until October in notifying the authorities in Manila that this money had been made available by Congress. They did not get it until November.

Senator SPENCER. That is for seacoast defenses?

General CARSON. Yes, sir; under seacoast defenses, Philippine Islands and Hawaii. The quartermaster reported in February that it would be required for the construction of storehouses. As I understand, this is not for increasing the defenses, but is for completing or rounding out the facilities that form a part of the installations already made. These are storehouses only.

Senator SPENCER. General, if I get you right, for the present year you had \$75,000 available for that purpose?

General CARSON. Yes, sir.

Senator SPENCER. But you are unable to use it because the notification about it came too late?

General CARSON. It was delayed.

Senator SPENCER. It was delayed; and therefore you want that amount which you now have unexpended made available for the next fiscal year, commencing on July 1, 1922?

General CARSON. Yes, sir; so that we can use it. We can start the work now, but we can not complete it, it is feared, before the end of June.

Corregidor Island is unique in its situation. Owing to the character of the defenses we have to do the work largely by hire of labor and purchase of material. We can not do it by contract because it is more or less secret, and that means that the money must be made available until the job is finished. If we could do it by contract, of course we could obligate the money before the end of the year, and then it could be expended even though the contract was not finished until after the next fiscal year begins; but where the Quartermaster must carry a pay roll of labor to complete the work, when June 30 arrives what is not actually expended goes back into the Treasury.

Senator JONES of Washington. This \$75,000 will do the work that you want to do; will it?

General CARSON. Oh, yes; there is no question about the amount. We merely desire to make it available until we can finish the work.

Senator JONES of Washington. If it is not made available by next year, then the work will not be done?

General CARSON. Then it can not be done.

Senator JONES of Washington. Is the work very important?

General CARSON. We think it is; yes, sir. It is for storehouses for material that is required in connection with the maintenance of the force at Corregidor Island.

Senator JONES of Washington. How are you getting along now without it?

General CARSON. The material is exposed. There is no protection whatever, and it makes it subject to rapid deterioration in that climate.

Senator JONES of Washington. What is the class of material that you have which is exposed?

General CARSON. It is ordnance material, principally. I mean by "ordnance material" everything pertaining to that. It may be ordnance supplies of various kinds, and there may be some vehicles in there. I explained that in the hearings before the committee last year, and I did not refresh my memory on that subject.

Senator WADSWORTH. The item to which the general refers is contained in the fortifications bill of this year. If the committee should decide to put it in, I think it would naturally go on page 42, following the paragraph entitled "Barracks and quarters, Philippine Islands."

General CARSON. I have not got the information here—I thought I had it in these hearings, but it is not here—as to the exact material in the storehouses in that plan of defense. I can insert that, Mr. Chairman, and give you exactly what it is intended to recover. I can not recall it from memory.

Senator WADSWORTH, I think it would be well, when you correct your testimony, to put that in.

General CARSON. Yes, sir.

The construction undertaken from the "Seacoast defenses, Philippine Islands and Hawaii, fiscal year, 1922," is as follows:

3 buildings, 48 by 108 by 14 feet, for storage of .30-caliber ammunition...	\$58,500
1 building, 35 by 30 feet, for housing six 5-ton artillery tractors.....	2,800
3 buildings, 25 by 45 feet, for storing twelve 10-ton artillery tractors....	9,000
1 building, 25 by 60 feet, for storing twelve 3-ton ammunition trucks....	7,800

Total.....	74,200
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The balance of \$800, together with whatever saving can be effected from the other items, will be devoted to the construction of one building, 25 by 60 feet, for storing 3-ton ammunition trucks.

Full description of these buildings is set forth on page 306 of the hearings before the subcommittee of the House Committee on Appropriations in charge of the fortifications bill, fiscal year 1922.

Senator WADSWORTH. Is there some other item?

General CARSON. No, sir; just those two, I believe, that I was requested to present to you. No increase in the appropriation is desired; simply this authority to utilize a portion of the appropriation

for "Barracks and quarters" for work required under "water and sewers," and extending authority to utilize existing appropriations during the next fiscal year.

STATEMENT OF COL. E. L. MUNSON, WELFARE BRANCH, PERSONNEL DIVISION, WAR DEPARTMENT.

Miss A. E. Phipps, director of women's relations, appeared.

MILITARY POST EXCHANGES.

Colonel MUNSON. Mr. Chairman, the War Department has designated me to make a few remarks in defense of the appropriation for military post exchanges. That work falls under the welfare branch, along with other duties pertaining to religion, recreation, and athletics.

The activities of the welfare branch are largely self-supporting. For example, the moving-picture activity is entirely a self-supporting proposition.

Senator JONES of Washington. Is it to be found in this bill?

Senator SPENCER. Yes; at the bottom of page 8.

Colonel MUNSON. The moving-picture activities, as I say, are entirely self-supporting. The recreation and athletics call for no money. The various activities in relation to civilian relations require no money. But there are two activities that do require governmental assistance. Both of those activities were turned over to the War Department, completely organized, by the welfare societies on November 1, 1919, and provided by them with funds to carry them through until Congress could appropriate sufficient funds for their maintenance; and the funds so turned over to the Government amounted to \$2,250,000, approximately. With the taking over of these two activities, which are the libraries and the hostess houses, the Government also took over a vast amount of property, many millions of dollars' worth of property; for example, if I recall rightly, a million and a half books from the American Library Association alone; and with this property went certain moral obligations on the part of the Government to continue their functions in a way that would be commensurate with the needs of the situation and the size of the military forces.

HOSTESS HOUSE SERVICE.

We regard the hostess-house work and the library work as extremely important features of the soldier's life, and as very valuable factors for the safeguarding of the soldier. We consider that the hostess-house work, for example, pays for itself financially through days of service saved to the Government by keeping the men out of trouble, by preventing desertions, by limiting infectious disease of certain kinds, by keeping the men out of the guardhouse, etc., and supplying a certain definite influence that they need to keep them contented with the military service, a certain feminine influence, which is always wholesome and always for good, and that in the same way the libraries are not only sources of recreation and good order but they are really reference libraries for officers, available for

the keeping up of officers in their military profession. We believe that these two functions which are being carried on under "welfare" deserve modest financial support. When I say "modest support," we have asked in the Budget estimates this year for \$50,000 for post exchanges—

Senator SPENCER. Does that include both the libraries and the hostess houses?

Colonel MUNSON. Yes, sir; \$50,000 for post exchanges proper, and then \$150,000 for hostess houses and libraries, of which \$90,000 was to be allotted for hostess houses and \$60,000 was to be for maintenance of libraries. Of the \$50,000 for the military post exchanges \$30,000 was for repairs and upkeep and \$20,000 was for magazines. That is a total of \$200,000. The \$150,000 estimate for hostess houses and libraries was based on an Army of 150,000 men, with an allowance of \$1 per man per year, a little over 8 cents a month, a little over 2 cents a week per man, and we figured it out that we could maintain this library and hostess house service in a pretty efficient way on that basis.

In regard to the library system, I might say that at Camp Travis, for example, they have as many as 77,000 books in one library, and it requires a certain amount of expert superintendence and guiding and control to keep such a library from so deteriorating and becoming so useless that it does not fulfill its purpose.

Senator WADSWORTH. How many books did you say you have in all the libraries altogether?

Colonel MUNSON. Over a million. I can give you the exact figures. They are changing all the time. Some of them are going to the bad, and we have been asking for a small amount of money for library upkeep in the way of supplying new books, and we had figured on 10 cents per man per year, \$15,000.

Senator SPENCER. Colonel, what can you do with the \$15,000 that the House allowed you?

Colonel MUNSON. We can do nothing, sir. We can not even buy the magazines that we bought last year. We have not anything for superintendence; we have not a dollar for a new book, and if we spend it for magazines we can not even have anybody to supervise the running of what we have. They will simply go back to the old days when the post library was an establishment which was potential, but not used. It was locked most of the time. It was a difficult matter to get a book out.

The books were lost; they deteriorated; they were never kept up, and the result was that nobody gave interest or attention to it. Now we have endeavored to utilize the Army library as a live thing, something more than a collection of books. We have tried to bring this thing to the attention of the men in such a way that they will not only use the library, but will use it selectively; and we may say that as much as from six to eight times as many books are used by the soldiers as are used in the city of New York or Chicago or other large cities in proportion to population. In other words, the libraries have carried instruction in a suggestive way to these young men in the Army, and we have been able to fill in their odd time, help this education, and keep them out of trouble at an extremely low expense. It does not take the cost of many desertions, it does

not take many days lost in the hospital or the guardhouse, to equalize the very modest little appropriation that we are asking.

Senator SPENCER. What can you do with \$35,000 for hostess houses?

Colonel MUNSON. We can do very little. We will endeavor to keep the germ of the organization alive, and will be able to supply a few places; but we feel there, too, that these civilian military training camps and the R. O. T. C. camps are in need of a little women's guidance when they come into operation during the summer. They need something of that sort, and we need to have a little nucleus that would enable the sending of a trained woman or so to those camps to look after those young boys when they come in for training. We feel that the hostess system for the Army, however the latter may be reduced, while it may need numerically less hostesses, is still a 100 per cent necessary proposition for every young recruit that comes into the service; and we feel that the war has demonstrated that the feminine influence is of tremendous value to the service, directly and indirectly, not only to the recruit himself, who is liable to get homesick and wants a little woman's advice, not only for the safeguarding of his own society but because these hostesses take upon themselves the general welfare oversight, under the commanding officer, of all the soldiers' wives and children, etc., and they start all kinds of useful activities among them, looking to better living conditions, more helpfulness, better child welfare, etc.

Senator SPENCER. How did you divide and use the \$150,000 which you had this year?

Colonel MUNSON. We have never had any money from anything but unappropriated funds. Congress has never made an appropriation for this work.

Senator SPENCER. I refer to the \$150,000 that was available this year.

Colonel MUNSON. We asked for it, but for next year it has been cut down.

Senator SPENCER. No; but under the current year that ends next June you have \$150,000 appropriated.

Colonel MUNSON. For military post exchanges; yes, sir. None of that went to hostess-house work.

Senator SPENCER. Did any of it go to libraries?

Colonel MUNSON. Only a little of it went for magazines.

Senator SPENCER. How much?

Colonel MUNSON. \$30,000.

Senator JONES of Washington. Do you have the same language that is proposed here?

Colonel MUNSON. It is practically the same; but last year, you see, we went on nonappropriated funds. We had this surplus.

Senator JONES of Washington. You did not have this \$150,000 appropriated?

Colonel MUNSON. That was for military post exchanges. It was not used.

Senator JONES of Washington. That language is, "For the conduct and maintenance of hostess houses."

Colonel MUNSON. Yes, sir; but the hostess houses were supported from these "other funds," turned in by defunct organizations, military organizations, and post exchanges going out of business, etc.

Senator JONES of Washington. You could have used this \$150,000 for that purpose during the current year?

Colonel MUNSON. It was practically all used for post exchange repairs.

Senator JONES of Washington. But, I say, you could have used it for hostess-house purposes?

Colonel MUNSON. We could have used a very small part of it, such as might have been diverted from other purposes.

Senator JONES of Washington. There was not anything in the language of the statute that prevented you from using it for hostess-house purposes, was there?

Colonel MUNSON. No, sir.

Senator JONES of Washington. That is what I mean; so it was available for that purpose, but you used it for something else?

Colonel MUNSON. We used it for the upkeep and repair of post exchanges, practically.

Senator JONES of Washington. How much have you used for hostess-house purposes during the current year?

Colonel MUNSON. \$112,000, I think.

Miss PHIPPS. That is what our pay roll is now. That is nonappropriated funds.

Senator WADSWORTH. Are the funds left by the welfare societies exhausted?

Colonel MUNSON. Practically; yes, sir. After this year they practically will be gone. There is a very limited amount left.

Senator SPENCER. Do you remember how much is left of that now?

Colonel MUNSON. The largest fund we have left relates to the fund that was set aside, \$225,000, for moving pictures. We have about \$100,000 of that left. That was to offset losses. Right now we are running at a profit on moving pictures.

Senator SPENCER. What do you mean by "running at a profit"? Where does that come from?

Colonel MUNSON. It comes from the admission receipts.

Senator SPENCER. Do you charge the soldiers for admission to the moving pictures?

Colonel MUNSON. Yes, sir. The Government runs a very well organized moving-picture service. It handles right now 113 posts, and in some of these posts the pictures are shown at a loss; there are 5 of them where they are shown at a considerable profit; there are others that break about even.

Senator SPENCER. Are the prices uniform?

Colonel MUNSON. Yes, sir.

Senator SPENCER. How much?

Colonel MUNSON. Fifteen cents, now. It has been 10 cents. At such a price we can give extremely good selections of moving pictures, keep the men on the reservation, give them some interest at home, and do it very economically. The service has to be centralized, though, because through a central agency we can get these moving pictures at so much less expense than a post exchange could get them, for example, hiring one film at a time. The centralized system is a very economical proposition and very satisfactory.

Senator JONES of Washington. Most of the money that you use for hostess houses comes from private sources?

Colonel MUNSON. It has been coming from that source: yes, sir. Now we are at the end of those private funds.

Senator JONES of Washington. They do not propose to put up anything more?

Colonel MUNSON. No, sir. You see, the welfare societies were asked to withdraw from the Army on November 1, 1919. All their activities were taken over by the Government. There were thus taken over, if I recall rightly, 51 hostess houses; were there not?

Miss PHIPPS. More than that.

Colonel MUNSON. That were actually running?

Miss PHIPPS. There were 51 hostess houses that were left that have been used right up until the last few months, but the rest of them were salvaged. There were hundreds of them, but all the welfare organizations were salvaged.

Senator HARRIS. How much are you asking for this work, Colonel?

Colonel MUNSON. We are asking for the original estimate of \$50,000 for post exchanges and \$150,000 additional for the hostess houses and library work. That is based on an Army of 150,000 men.

Senator JONES of Washington. You want \$200,000, then?

Colonel MUNSON. Yes, sir. Our work has all been calculated on the basis of \$1 per man per year. Of course, if the Army were cut down very much there would be a certain overhead that should be carried.

Senator HARRIS. You are asking for \$1 a year per man for these two things?

Colonel MUNSON. Yes, sir. Will you hear Miss Phipps now on this matter?

Senator WADSWORTH. Yes; we shall be glad to hear from you, Miss Phipps.

STATEMENT OF MISS A. E. PHIPPS, DIRECTOR OF WOMEN'S RELATIONS, WAR DEPARTMENT.

Miss PHIPPS. I should like to explain just a little bit about the non-appropriated funds and the appropriated funds.

Last year the military post exchange bill had a clause added to it for the conduct and maintenance of hostess houses, making the \$150,000 which was appropriated available for hostess houses; but there was some nonappropriated money on hand in the War Department, so it was decided that as the sum was so small for construction and repairs and other things that were necessary the hostess houses would continue to be carried on the nonappropriated funds; so we were not given any of that appropriated money last year, although under the law we were entitled to use it.

Senator JONES of Washington. What do you mean by "nonappropriated funds"?

Miss PHIPPS. The nonappropriated funds were money that was turned in by the affiliated welfare organizations and some other organizations.

Senator JONES of Washington. Money coming, then, from private sources?

Miss PHIPPS. From private sources entirely; and there were millions of dollars turned over for various activities. Last year the hostess houses were allotted from the War Department, of the non-

appropriated funds, \$80,000, and we reorganized and cut down and reduced salaries to carry on with \$80,000, where we had over \$300,000 the year before. That was sent out from the War Department to the different corps areas, and the hostesses were allotted to the corps areas according to the strength of the corps areas, the number of men in the corps areas. Then they were assigned to the important posts in their corps areas by the commanding general of the corps area and the local supervisors, who knew the local conditions better than we did in Washington.

We are now running at the rate of \$112,000 and a little more, and the difference between the \$80,000 and the \$112,000 has been made up by commanding officers who have wanted to keep their hostesses so much that they have been willing to collect odds and ends of post exchange money and nonappropriated money that they had left over from the year before to keep the hostesses; but those will not be available next year, so that to carry on the hostess service at all we must have money appropriated for us.

I have here a chart which shows the difference for the last three or four years. The first year, 1921, we had \$310,000. In 1922, this last year, we are running at the rate of \$112,350, and this year we are asking for \$90,000, so you can see that that is a very decided cut. That estimate was made because we felt that the Army would be cut down and the posts more or less consolidated, and we wanted to cut to the very lowest figure that we could operate on with any efficiency at all; and last year we cut the salaries. The salary of the director was cut \$1,000; the assistant director was cut out, and the assistant in the office was cut out.

The foreign supervisor in the Philippines was cut from \$3,000 to \$2,400. We cut out a grade of hostess at \$2,100, which was a training hostess, and made the supervisors do the training of the new hostesses coming in. We cut out about everything that we could last year. This year we have cut the supervisors from 12 to 9. We are obliged to keep supervisors, because we have entirely a trained personnel now. Anybody applying for a position as hostess has to go to a training school and be trained in the job and assigned to a post afterwards.

Senator SPENCER. Where is the training school?

Miss PHIPPS. The training schools are all around the country. When we had training houses and a larger personnel we had four. Now we train them wherever it is most convenient for the supervisor to do the training. If a person applies from New York, for instance, we send her down to Camp Dix and have her trained there under the supervisor, and last year—to go on with the necessity of supervisors—they also had a separate and distinct job, and that was to try and bring the women of the civilian communities near these camps into touch with the Army, and to try in some places to get them to provide reading rooms and clubs in the towns.

For instance, we got the women of Philadelphia to give us a big club there where the men come from Camp Dix, and it has been a very great success. The results on the morale and the health of the men have been tremendous. That was started because General Summerall said that something must be done to look after these youngsters who were going up to Philadelphia and did not know their way

about. We hope to do that in every big town near a camp, because most of the men are strangers in town; they do not know anybody, and they do not know where to go, and the result is that there is no place for them to go but the streets or else places where they are taken and should not be. And that is the particular job of the supervisor to, in the first place, select the proper personnel for the hostess service and train them to get the Army in touch with the women of the communities and to provide voluntary hostesses and see that they are assigned to the different summer training camps. That is a new job that has just come up in the last two years, of course.

We have not enough paid personnel to carry on the work in these big camps, and it is a very important part of our work, because there are young boys in the civilian military training camps and it makes a great difference with their families in letting them go to these camps if they know that proper recreation is being provided. We can not supply the hostesses from our regular pay roll, so we are obliged to keep a certain number of supervisors, and they report on the work of the area, they coordinate the work of the area, and they keep each hostess up to her job, and they see, if she becomes inefficient, that she is discharged.

We are cutting from 12 to 9. We had one for each corps area attached to the headquarters of the corps area, and we are cutting them this year from 12 to 9, consolidating corps areas, the First and the Second, Third Corps and District of Columbia, Fourth and Fifth, Sixth and Seventh, Eighth and Ninth Corps areas.

Senator SPENCER. Do you have supervision outside of the continental United States?

Miss PHIPPS. Yes; the Hawaiian, Panama, and Philippine Departments.

We are cutting down from 12 to 9, and that is about as low as we can cut the supervisors, because the minute you cut them any more it counts up on their travel; so it is just about as economical to have nine supervisors who do not travel so far as to have four supervisors who have to cover more territory, because their travel money mounts up to such an amount it is about the same thing.

Then, we have 36 hostesses and 5 hostess aids. That means that under the \$90,000 that we have asked for it costs the Government 5 cents a man per month to run the welfare service, and it allows us one hostess or supervisor to 3,000 men, and as we have about 200 or more posts you can see that 51 hostesses will not get us very far. If we are cut below 50 hostesses we can not possibly cover the demands. We can not cover the demands for hostesses now. The letters that come in from the commanding officers all over the country to my office asking to have something done is something that is astonishing. Then, the corps area commanders say the summer camps are coming on and want us to supply them with hostesses for the summer camps. We can not cover it with 112, so if we are cut below 90 I do not know what we will do.

I think the value of the service has been pretty well demonstrated, and I can read extracts from letters of commanding officers which prove it. It is no longer experimental. We have been two years in bringing this thing to a practical basis. Of course, there was a great deal of sentimentality connected with it during the war, and that is one thing we had to fight when we took it over. We had to

weed out hundreds of women because they could not get it into their heads that it was a practical welfare job and not a sentimental thing, pampering the boys. It has now gotten to be just as practical as the social welfare service in any factory. And if the Army cuts out this thing it will be just like in any other organization—if it does not keep it up it will fall back.

The Army authorities and the police all try to clean up the towns and to take care of the vice situation, but that simply makes a vacuum, and you have got to provide something in its place. If you tell a man that he can not do this and can not do that and do not give him anything else to do, you are not getting anywhere. But we believe we have struck the constructive principle of providing something proper and decent and normal which will keep him from going out and hunting for trouble, and I think it has been absolutely proved by the testimony of the commanding officers of the posts, and that is a great deal better than my testimony could be.

If there are any questions you would like to ask me, I would be very glad to answer them.

Senator WADSWORTH. How long have you had charge of this work, Miss Phipps?

Miss PHIPPS. I have been in a little over a year. the 15th of this last month.

Senator WADSWORTH. You are director?

Miss PHIPPS. Yes; director women's relations. I was supervisor before that. But I started the first training school at Camp Dix and proved the efficacy of that.

Senator HARRIS. When did you start that school?

Miss PHIPPS. That was started after the conference the War Department held at Camp Grant to teach the recreation people their job, in August, 1920, and the school was started when I came back to Governors Island on the 1st of September. I believe they had 25 women in that school, and out of that 25 we probably kept 4 or 5, which shows that we try to get the proper personnel, and almost every single woman in this service, as you can see by the pay scale, gets very little. They get \$1,500 a year, and that is absolutely the only cost to the Government.

Senator SPENCER. Do they get quarters and sustenance?

Miss PHIPPS. They get no sustenance and are not entitled to quarters. If there is any old place they can sleep in, they can live in the post. In fact, they are supposed to live in the post, because they can not do their work properly if they are living outside the post. You see, the dances do not end until 11 o'clock at night, and they have three or four of those dances a week, and the hostess is always the last one to leave, and that means she does not get away until half-past 11, or somewhere about that; and if she has to go a long distance she can not possibly get back early enough in the morning. These women work 10 and 12 hours a day. They are in at 9 o'clock in the morning and visit the families of the men; the women and children; attend to their living conditions; get up all sorts of things for the children. Very often they have gotten up a Girl Scout band and got them attached to the scouts in the town, which makes a very good feeling between the community and the camp. We are now trying to get the Red Cross to give us visiting nurses for the women in the summer camps where the Army Nurse Corps is now stationed.

Senator SPENCER. Sometimes they have quarters in the hostess building, do they not?

Miss PHIPPS. Yes, sir.

Senator SPENCER. Where does the hostess eat?

Miss PHIPPS. In the cafeteria. If there is an officers mess, she eats there.

Senator SPENCER. And she pays for her food?

Miss PHIPPS. Yes. Often they have a post cafeteria and she eats there; often they do their own cooking. So the salary is the only cost we have; no other costs whatever. Of course, the supervisors have to travel, and I have to travel occasionally, and there is traveling cost.

Senator WADSWORTH. It is very interesting, and I have no doubt it is a very fine work.

Miss PHIPPS. Every woman who is in the service to my knowledge is in it not for the money she gets out of it but because she believes she is actually accomplishing something, and that is the reason we have been successful, I think.

Senator WADSWORTH. Are most of them college women, Miss Phipps?

Miss PHIPPS. A good many of them are; I would not say most of them; no. A good many are women who went overseas. Those were the first lot of our recruits, the women who went overseas with the Army, and we found some of them very successful; some of them were not at all successful, because they still kept the sentimental attitude, which we are trying to get away from.

Senator WADSWORTH. We are very much obliged to you, Miss Phipps.

Captain DENNING. Mr. Chairman, Colonel Munson has Major Atkisson here from Edgewood Arsenal, whom he would like the committee to hear.

STATEMENT OF MAJ. E. J. ATKISSON.

Senator WADSWORTH. Major, are you in command of Edgewood Arsenal?

Major ATKISSON. I am, sir. I feel very strongly about this question of hostesses at Army posts, due to my own experience at Edgewood Arsenal, extending over two years.

When I went to Edgewood Arsenal there were no facilities of that kind at the arsenal. In fact, there was not a single place at Edgewood Arsenal where a woman could stay overnight. We had some 1,500 troops there, and that condition really extended into Baltimore. There was really no decent place in the city of Baltimore where my men were welcome. I had quite a large number of women employees working in the arsenal at that time, several hundred in the gas-mask factory. The men and women were thrown together just naturally—they got together. And I found a very deplorable state of affairs. If a girl and a man were seen together there was a question put upon them such that decent girls could not be seen out there on the roads. The reputation of Edgewood Arsenal was practically nil.

We worked and worked and worked and finally succeeded in getting a hostess. The hostess was out there, we fixed her up a little hostess house, and I think that conditions improved within one month more than 100 per cent.

The reputation of Edgewood Arsenal changed from black to white with the arrival of that hostess at Edgewood Arsenal. She has been busy ever since she has been there. I called her up this morning before I left and she told me she had taken care of 680 women and children in her hostess house between January 1 and this last January 1. Before she got her little house the men's relatives would come there and I would see them sitting on the stoop of the barracks. There was not any place else for them to go. The company officers would take them in the orderly room and have food brought to them. They could not stay overnight. That is all taken care of now.

The hostess has many practical duties that she takes care of; she is kept very busy all the time. And the real importance to me of having this hostess at Edgewood Arsenal is a bigger and more important one. By having her there she provides an essential that is needed in the life of any organization of persons. I think an Army post has an entity or personality just like a person has, and it has a character and it has a reputation. With that hostess there better things are represented. We can get the best girls in Baltimore to come out and dance with the men now, where without the hostess they would not even consider coming. By having the hostess there and a hostess house, a place where women can be taken care of decently, the atmosphere is so much improved that there is no question about the handling of the situation.

At their parties the hostess is present and it is always on a high plane. Before that it was not. Just naturally, I think, due to human nature, it was below normal. The whole atmosphere of the place has improved; our character is better, our reputation is good, and it is due to the fact that we have a fine woman there looking after these things. It is so noticeable that I really do not know what we will do if we lose that woman on the 1st of July. It is a serious matter.

Senator WADSWORTH. Do you care to ask the major any questions?

How many troops have you there now?

Major ATKISSON. I have 500; I am expecting an increased garrison on the 1st of June, and expect from 300 to 400 men there this summer in training camps.

Senator WADSWORTH. The increased troops are to make use of those barracks you showed me?

Major ATKISSON. Yes.

Senator WADSWORTH. They are not to be gas mask troops?

Major ATKISSON. No, sir; infantry, sir.

Senator WADSWORTH. Are there any questions you would like to ask the major?

We are very much obliged to you.

Miss PHIPPS. Senator Wadsworth, we have these tabulations. Would you like those put in to show the actual operation under the appropriation?

Senator WADSWORTH. Yes; I think it would be very well to put those in the hearing. They are not very lengthy, are they, Miss Phipps?

Miss PHIPPS. No. There is one here that shows the difference in the last three years and what we mean to do with them—the number

of supervisors, etc. I do not believe you would want to have the ones where we intend to put the women, would you?

Senator WADSWORTH. Where you intend to put the money if it is appropriated, do you mean?

Miss PHIPPS. Yes.

Senator WADSWORTH. Yes; I think that would be very instructive. (The tabulations are as follows:)

BUDGET FOR HOSTESSES, FISCAL YEAR 1923.

JANUARY 28, 1922.

1. The following budget for the conduct and maintenance of the hostess service for the fiscal year 1923 is submitted. This is the lowest sum on which the service can be maintained with any efficiency:

1 director	\$4,000
9 corps area supervisors, at \$2,400	21,600
36 hostesses, at \$1,500	54,000
5 hostess aids, at \$1,350	6,750
Travel for supervisors	3,650

Total..... 90,000

2. The above estimate is based on the allotment of one woman of the hostess service—either supervisor, hostess, or hostess aid—to every 3,000 men at each corps area and department. This hostess personnel will be allotted to the corps areas and departments in proportion to the strength of the command, and will be assigned within that command in the judgment of the corps area or department commanders. This estimate reduces the number of corps area and department supervisors from 12 to 9. The number employed heretofore (12) has provided for 1 supervisor attached to each corps area and department; the above low estimate combines the First and Second Corps Areas under one supervisor, the Third Corps Area and the district of Washington under one supervisor, the Fourth and Fifth Corps Areas under one supervisor, and the Sixth and Seventh Corps Areas under one supervisor. This does not conform to the corps area and department organization of a complete and separate unit in each corps area, but owing to the necessity for the reduction of the estimate from the original submitted of \$120,000, it is believed that it would be for the greater efficiency of the hostess service to reduce the number of supervisors rather than to reduce any further the number of hostesses. These nine supervisors will also act as hostesses.

Comparative estimates for women's relations, fiscal year 1923.

	Nonappropriated, fiscal year 1922 (allotted \$310,900).		Nonappropriated fiscal year 1922.		Requested appropriation, 1923, \$90,000.		Amount in committee report, \$35,000.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
Director.....	1	\$5,000	1	\$4,000	1	\$4,000	1	\$3,500
Assistant director.....	1	3,000						
Stenographer.....	1	1,800						
Probational, at \$1,200.....	20	24,000	1	600				
Supervisors, at \$3,000.....	1	3,000						
Supervisors, at \$2,400.....	11	26,400	12	28,800	9	21,500	4	9,600
Hostesses, at \$2,100.....	5	10,500						
Hostesses, at \$1,800.....	12	21,600						
Hostesses, at \$1,500.....	78	117,000	35	52,500	35	5,400	12	18,000
Hostesses, at \$1,200 to \$1,400.....	17	21,350	15	20,250	5	6,750		
Travel of director.....		12,000		4,600		3,650		3,900
Total.....	147	245,600	65	112,350	51	90,000	17	35,000

16 months.

* 8 months, \$1,600.

Appropriation of \$90,000 costs the Government 5 cents per man per month: allows for Army of 150,000 men: 1 hostess or supervisor to 3,000 men: allows 50 hostesses to approximately 200 posts.

Appropriation of \$35,000 allows for Army of 115,000 men: 1 hostess or supervisor to more than 7,000 men: allows for 16 hostesses to 200 posts.

Any proportionate reduction in this estimate to a reduction in the strength of the Army should be made at the same rate as at present, of 5 cents per man per month, or 60 cents per year.

The proposed allotment is as follows (this is subject to revision as troops are reallocated to areas and departments) :

	Number.	Official.	Amount.
Welfare branch, Washington, D. C.		Director	\$4,000
First Corps Area	1	Supervisor	2,400
Second Corps Area			
Third Corps Area	1	do.	2,400
District of Washington			
Fourth Corps Area	1	do.	2,400
Fifth Corps Area			
Sixth Corps Area	1	do.	2,400
Seventh Corps Area			
Eighth Corps Area	1	do.	2,400
Ninth Corps Area	1	do.	2,400
Hawaiian Department	1	do.	2,400
Panama Department	1	do.	2,400
Philippine Department	1	do.	2,400
			<u>21,600</u>
First Corps Area	1	Hostess	1,500
Second Corps Area	3	Hostesses	4,500
Third Corps Area	1	Hostess aide	1,350
District of Washington	3	Hostesses	4,500
Fourth Corps Area	1	Hostess	1,500
Fifth Corps Area	3	Hostesses	4,500
Sixth Corps Area	1	Hostess	1,500
Seventh Corps Area	2	Hostess aide	1,300
Eighth Corps Area	7	Hostesses	3,000
Ninth Corps Area	3	do.	4,500
Hawaiian Department	1	do.	10,500
Panama Department	3	Hostess aide	1,350
Philippine Department	1	Hostesses	4,500
	3	Hostess aide	1,350
	4	Hostesses	4,500
	2	do.	3,000
	4	do.	6,000
Total	36		<u>60,750</u>
Total personnel			\$86,350
Travel corps area supervisors			3,650
Total			<u>90,000</u>

A. E. PHIPPS,
Director Women's Relations.

The proposed allotment of \$90,000 is as follows (this is subject to revision as troops are reallocated to areas and departments) :

Welfare Branch, Washington, D. C., director	\$4,000
First and Second Corps Areas, 1 supervisor	2,400
Third Corps Area and district of Washington, 1 supervisor	2,400
Fourth and Fifth Corps Areas, 1 supervisor	2,400
Sixth and Seventh Corps Areas, 1 supervisor	2,400
Eighth Corps Area, 1 supervisor	2,400
Ninth Corps Area, 1 supervisor	2,400
Hawaiian Department, 1 supervisor	2,400
Panama Department, 1 supervisor	2,400
Philippine Department, 1 supervisor	2,400
Total	<u>21,600</u>

Necessary allotment of \$35,000:

Welfare Branch, Washington, D. C., director	3,500
First, Second, and Third Corps Areas, district of Washington, and Panama, 1 supervisor	2,400
Fourth, Fifth, Sixth, and Seventh Corps Areas, 1 supervisor	2,400
Eighth and Ninth Corps Areas, and Hawaii, 1 supervisor	2,400
Philippines, 1 supervisor	2,400
Total	<u>10,700</u>

Assignment of hostesses—Women's relations.

Unit.	Strength.		1921	1922	Proposed, 1923.	Assignment on \$35,000.
	Men.	Women.				
<i>First Corps Area, 11 posts, 5,598 men.</i>						
Headquarters.....			Supervisor	Supervisor		
Coast defenses of Boston.....	380		1 hostess	do ¹		
Camp Devens.....	90		2 hostesses	do ¹		
Fort Ethan Allan.....	380		1 hostess	1 hostess	1 hostess	
Coast defenses of Portland.....	596		do			
Coast defenses of Long Island.....	866		do			
Coast defenses of Narragansett.....	456		do			
<i>Second Corps Area, 28 posts, 15,408 men.</i>						
Headquarters.....			Supervisor	Supervisor	Supervisor	
Camp Dix.....	6,316	400	4 hostesses	Supervisor, 3 hostesses.	2 hostesses.	
Fort Jay.....	728	28	1 hostess			
Lakehurst Proving Ground.....			do			
Mitchel Field.....	718	46	do			
Fort Ontario.....	232	41	do			
Plattsburg Barracks.....	1,052	12	do	1 hostess	1 hostess	1 hostess.
Baritan Arsenal.....	195	144	do			
Fort Slocum.....	1,278	50	do	1 hostess	1 hostess	
Camp Vail.....	575	63	do			
<i>Third Corps Area, 14 posts, 10,609 men.</i>						
Headquarters.....			Supervisor	Supervisor	Supervisor	
Aberdeen.....	287		1 hostess			
Carlisle General Hospital.....	370	22	do			
Edgewood Arsenal.....	433	604	do	Supervisor ¹	Supervisor	
Camp Eustis.....	1,367	132	2 hostesses	1 hostess	1 hostess	
Holabird.....	623	10	1 hostess	do	do	
Fort Howard.....	267	12	do			
Camp Humphreys.....	744		2 hostesses	1 hostess		
Langley Field.....	639	80	1 hostess	do		
Camp Meade.....	3,055	900	3 hostesses	2 hostesses	2 hostesses	1 hostess.
Fort Monroe.....			1 hostess	1 hostess		
<i>4,913 men.</i>						
Headquarters.....				Supervisor		Supervisor.
Walter Reed.....	709		3 hostesses	1 hostess	1 hostess	
Fort Meyer.....	1,004		1 hostess	Supervisor ¹		
Fort Washington.....	477		do	do ¹		
Bolling Field.....	251			do ¹		
<i>Fourth Corps Area, 21 posts, 71,576 men.</i>						
Headquarters.....			Supervisor	Supervisor	Supervisor	
Fort Oglethorpe.....	1,139	100	1 hostess	do ¹	do ¹	
Camp Benning.....	5,361	900	2 hostesses	1 hostess	1 hostess	1 hostess.
Camp Bragg.....	1,717	143	do	do	do	
Carlstrom Field.....	490		1 hostess			
Camp Jackson.....	534		do			
Fort McPherson.....	357	130	2 hostesses	1 hostess		
Coast defenses of Savannah.....	36		1 hostess			
Coast defenses of Tampa.....	33		do			
Camp McClellan.....	93			1 hostess	1 hostess	
<i>Fifth Corps Area, 8 posts, 5,928 men.</i>						
Headquarters.....			Supervisor	Supervisor		Supervisor.
Columbus Barracks.....	739	119	1 hostess	1 hostess		
Fairfield Proving Ground.....	17		do			
Fort Benjamin Harrison.....	627	126	Supervisor	Supervisor ¹	1 hostess	
Camp Knox.....	3,323	369	2 hostesses	2 hostesses	do	
Camp Sherman.....	130		1 hostess			
Fort Thomas.....	608	130	do			

¹ Supervisor acting as hostess in these posts in addition to her other duties.

Assignment of hostesses—Women's relations—Continued.

Unit.	Strength.		1921	1922	Proposed, 1923.	Assignment on \$35,000.
	Men.	Women.				
Corps Area, 4 posts, 4,910 men.						
Headquarters.....			Supervisor..	Supervisor..		
Sheridan.....	1,683	50	1 hostess..	do.	1 hostess..	
Brady.....	362	20	do.	1 hostess..	do.	
Field.....	1,024	34	do.	do.		
Grant.....	587					
Wayne.....	706			1 hostess..		
Seventh Corps Area, 9 posts, 7,311 men.						
Headquarters.....			Supervisor..	Supervisor..	Supervisor..	
Crook.....	285	30	1 hostess..	1 hostess..	1 hostess..	
Moines.....	485	31	do.	do.		
Leavenworth.....	775	185	2 hostesses..	do.	1 hostess..	
Pike.....	388		do.			
Riley.....	1,585		do.	1 hostess..		
Snelling.....	911	55	1 hostess..	do.	1 hostess..	
Jefferson Barracks.....	850	75	do.	Supervisor..	do.	
Eighth Corps Area, 20 posts, 24,155 men.						
Headquarters.....			Supervisor..	Supervisor..	Supervisor..	
Camp Travis.....	6,070	166	3 hostesses..	2 hostesses..	2 hostesses..	1 hostess.
Fort Sam Houston.....	1,362	32	1 hostess..	1 hostess..	1 hostess..	
Fort Bliss.....	2,500	125	do.	do.	do.	1 hostess.
Brooks Field.....	341	41	do.	do.	do.	
Fort Brown.....	298		do.			
Fort Clark.....	635		do.			
Fort Douglas.....	860	37	do.			
Eagle Pass.....			do.			
Fitzsimmons General Hospital.....	572	27	do.	1 hostess..	1 hostess..	
Camp Furlong.....	1,067		do.			
Fort Huachuca.....			do.			
Kelly Field.....	918		do.	1 hostess..	1 hostess..	
Fort McIntosh.....	383		do.			
Camp Normoyie.....	340		do.			
Fort Ringgold.....	132	14	do.			
Fort Sill.....	2,120	250	do.	1 hostess..	1 hostess..	1 hostess.
Fort Logan.....	283	18	do.			
Del Rio.....			do.			
San Benito.....			do.			
Ninth Corps Area, 32 posts, 17,179 men.						
Headquarters.....			Supervisor..	Supervisor..	Supervisor..	Supervisor.
Presidio of Monterey.....	696	60	1 hostess..	do.	do.	
Benicia Arsenal.....	47	28	do.			
Fort Douglas.....	339	48	do.			
Camp Lewis.....	4,035	350	2 hostesses..	2 hostesses..	2 hostesses..	1 hostess.
Fort McDowell.....	684	65	1 hostess..	1 hostess..		
March Field.....	202	17	do.	do.		
Mather Field.....	383	33	do.	do.		
Rockwell Field.....	128		do.	do.		
Fort D. A. Russell.....	1,497	69	do.	do.	1 hostess..	
Vancouver Barracks.....	845	98	do.	do.		
Coast defenses of Columbia.....	42	73	do.			
Coast defenses of San Francisco.....	1,181	77	2 hostesses..			1 hostess.
Fort McArthur.....			1 hostess..			
Fort George Wright.....	337	27	do.			
Ross Field.....	498		do.			
Panama Department, 9 posts, 7,443 men.						
Headquarters.....			Supervisor..	Supervisor..	Supervisor..	Supervisor.
Gatun.....	292		1 hostess..	1 hostess..	1 hostess..	
Davis.....			do.	Supervisor..	Supervisor..	
France Field.....	235		do.	1 hostess..	1 hostess..	1 hostess.
Fort Gaillard.....	1,515		do.		do.	
Coast defenses of Balboa.....	785		do.			

¹ Supervisor acting as hostess in these posts in addition to her other duties.

Assignment of hostesses—Women's relations—Continued.

Unit.	Strength.		1921	1922	Proposed, 1923.	Assignment on \$35,000.
	Men.	Women.				
<i>Hawaiian Department, 5 posts, 12,066 men.</i>						
Headquarters.....			Supervisor..	Supervisor..	Supervisor..	
Honolulu.....	1,340		.....do. ¹	.....do. ¹	.....do. ¹	
Schofield Barracks.....	7,632		1 hostess.....	1 hostess.....	1 hostess.....	1 hostess.
Fort Shafter.....			.....do.....	.....do.....	.....do.....	
Pearl Harbor.....	1,716		.....do.....	.....do.....	.....do.....	
<i>Philippine Department, 10 posts, 15,138 men.</i>						
Headquarters.....			Supervisor..	Supervisor..	Supervisor..	Supervisor.
Post of Manila.....	1,008		2 hostesses.....	.....do. ¹	.....do. ¹	1 hostess.
Stotenberg.....	2,979		.....do.....	1 hostess.....	1 hostess.....	
Coast defenses of Manila.....	4,081		2 hostesses.....	2 hostesses.....	.....do.....	1 hostess.
China Expeditionary Force.....	573		.....do.....	1 hostess.....	.....do.....	

¹ Supervisor acting as hostess in these posts in addition to her other duties.

CLAIMS OF OFFICERS, ENLISTED MEN, AND NURSES OF THE ARMY FOR
DESTRUCTION OF PRIVATE PROPERTY.

Captain DENNING. The appropriation asked for the item "Claims of officers, enlisted men, and nurses of the Army. for destruction of private property." is \$50,000; the estimate was greater than that in the Budget but was reduced during the hearings before the House committee, to \$50,000. This item was omitted from the House bill.

Senator WADSWORTH. That is the item which appears on this side slip pasted on the bottom of page 23?

Captain DENNING. Yes, sir.

Senator WADSWORTH. Your suggestion is that \$50,000 be appropriated there instead of \$100,000 which is in the print on the slip?

Captain DENNING. Yes, sir; \$50,000 is the amount which was reached before the House committee.

Senator JONES. What do you mean by that—that the House committee put it in the bill and it then went out on the floor?

Captain DENNING. No, sir; I do not think it was ever included in the bill.

Senator JONES. What do you mean by saying \$50,000 was reached by the House committee?

Captain DENNING. During the hearing the Chief of Finance requested, instead of the amount set forth in the Budget, that \$50,000 be considered as the estimate.

Senator JONES. Oh, I understand. How are these items paid now? Do you have to get special bills through, or have you a fund there?

Captain DENNING. There is a balance under this item. At the present time that balance is about \$101,000. It is the remainder of that \$300,000 that came up in the discussion the other day. This is the item for which the \$300,000 was appropriated, and this is a balance that remains unexpended to take care of these claims.

Senator WADSWORTH. These are the war-time claims?

Captain DENNING. Yes, sir.

Senator WADSWORTH. For loss of baggage, I suppose?

Captain DENNING. Yes, sir; about 80 per cent of them are overseas matters. There are about 20 per cent that occurred here in the United States.

Senator JONES. You want only \$50,000 of that unexpended \$101,000?

Captain DENNING. No, sir; we need \$50,000 additional.

Senator JONES. In addition to the \$101,000?

Captain DENNING. Yes, sir. We estimate now there will be about \$65,000 claims, but that they will be reduced to such an extent that \$50,000 will cover them.

Senator WADSWORTH. Do you think you can pretty nearly clean them up this next year?

Captain DENNING. With that additional \$50,000 it is estimated we will be able to clean up.

Senator WADSWORTH. Do you happen to recollect, Captain, how much has been spent under this heading since the war?

Captain DENNING. About \$198,000 has been spent for this particular class of claims so far; and we have this balance of \$101,000. A good many of these claims are now before the accounting officer for settlement and that will be expended before the close of this fiscal year.

Senator WADSWORTH. You think it will?

Captain DENNING. Yes, sir.

Senator WADSWORTH. You think this \$50,000 will end it?

Captain DENNING. That is the assumption the War Department is working on now. It is estimated that \$50,000 will provide for the settlement of this class of claims now on hand and to be received during 1923.

Senator HARRIS. What do the claims average, Captain?

Captain DENNING. They average about \$150 apiece, Senator. The general average is \$150. Of course, they run anywhere from \$250 down to \$2—a very few of the \$2 class.

Senator WADSWORTH. What is the nature of them, generally speaking?

Captain DENNING. Well, lost officers' equipment, nurses' equipment, materials and supplies that they are required to procure and purchase themselves that were lost in transportation and by fire or other damage. A great number of those overseas, of course, were lost as a result of transportation and change of station; they have been lost and not recovered.

Senator JONES. You take care of current losses in this, too?

Captain DENNING. Yes, sir.

Senator WADSWORTH. The current losses are taken care of in the \$50,000, which appears in line 15, page 23, are they not?

Captain DENNING. Those are claims for damages to and loss of property of citizens.

Senator WADSWORTH. Civilians, are they?

Captain DENNING. Yes; civilian.

Senator WADSWORTH. Then, you do take care, as Senator Jones suggested, of current losses as well as war-time losses out of this?

Captain DENNING. Yes, sir; the bulk of this money is to take care of the war-time conditions.

Senator WADSWORTH. You do not think the \$100,000 you have now will carry you through?

Captain DENNING. No, sir; because that is about all obligated now, and we are receiving claims at the rate of about 40 a month. We do not think that will continue, however, we estimate an average of 20 per month will cover those received during 1923.

PAY OF CIVILIAN EMPLOYEES.

**STATEMENT OF MR. N. P. ALIFAS, PRESIDENT DISTRICT NO. 44,
INTERNATIONAL ASSOCIATION OF MACHINISTS.**

Senator JONES. You might state your name to the reporter.

Mr. ALIFAS. N. P. Alifas, president district No. 44, International Association of Machinists.

Mr. Chairman and gentlemen, I am representing the machinists in the Government service, and I want to call your attention to some language that is in the bill.

Senator SPENCER. What page is it on?

Mr. ALIFAS. The language on page 101, beginning at line 24. that we would like to have eliminated from the bill. The language reads:

✓ No part of the moneys appropriated in this act shall be used for paying to any civilian employee of the United States Government an hourly wage or salary larger than that customarily paid by private individuals for corresponding work in the same locality.

Senator SPENCER. Is that language new this year?

Mr. ALIFAS. No, sir; it was incorporated in the act of last year.

Senator SPENCER. Was it new last year?

Mr. ALIFAS. It was in last year; yes, sir.

Senator SPENCER. Was it new last year?

Mr. ALIFAS. It was new last year; yes, sir.

The Senate committee last year substituted some language in place of that by inserting after the word "Government," on page 102, line 1, the words "other than those whose pay is adjustable from time to time through wage boards or similar authority."

The House declined to yield last year, but we thought that possibly this year the language could be eliminated, for this reason—

Senator JONES. That is, you want all the language eliminated?

Mr. ALIFAS. All of the language; yes, sir; for the reason that the purpose for which it was intended has been accomplished and it is no longer necessary.

The amendment was offered on the floor of the House by Congressman Luce, of Massachusetts, and in his remarks justifying the language he says in part as follows:

I understand in the arsenals, and possibly in the navy yards, there are boards of adjustment which carry into effect precisely the proposal here. The justice of the principle therein applied we all recognize. This provision intends that the same principle should be applied throughout the expenditure of all the money herein appropriated. To illustrate, I received yesterday a letter from a constituent, in which he spoke of a young woman who had come to him saying that she has been receiving \$25 a week from the Government for an hour and a half less work a day than she had previously done for \$15 a week. My constituent was willing to pay \$18 a week. He finds himself unable to compete under those circumstances with officers of the Army, who are disposed to pay high prices, who are apparently without restriction, and who take away from private employers skilled employees by offering unreasonable wages.

That appears to be the motive that prompted the offering of this amendment; that is, it was claimed there were people receiving rates way in excess of what was being paid in the vicinity.

I would like to call your attention to what we would call the injustice of the amendment. In the first place, for a generation the way—

Senator SPENCER (interposing). By the amendment you mean this provision?

Mr. ALIFAS. The provision that is new in the law; yes, sir. I was referring to the amendment offered by Mr. Luce, which is the provision in the existing law.

For a generation employees at the arsenals had their wages set by the commanding officers, who usually have appointed wage boards to recommend rates of pay for them, and they have received the prevailing per diem rates instead of hourly rates, but when the Government passed the 8-hour law it was with the understanding that the day's pay should go for an 8-hour day and that the employee should not receive, say, eight-ninths of what was paid in the private shop; and this clause would require the Government to pay as a maximum only eight-ninths of what was being paid in a shop working nine hours. In the case of a clerk it would require the Government to pay only seven-eighths of what was being received by a clerk in private industry. We felt that was something Congress did not really intend should be done. For years they have always authorized the departments to pay the prevailing per diem rates.

Now, another thing. It says that they shall not pay more than this. That means that that is the maximum. There is nothing to prevent them from paying less than that. There is no law requiring that they shall pay this prevailing rate, but this provides that they shall not pay more than the prevailing rate. In view of the fact this is a restriction on the appropriation, the disbursing officers would be reluctant to pay even the prevailing rate for fear they would be paying too much, so the temptation exists to pay less than the prevailing rate in order to be sure to be on the safe side.

Senator WADSWORTH. How has it worked this fiscal year?

Mr. ALIFAS. Well, this applies only to this fiscal year, of course.

Senator WADSWORTH. But it has been working now since last July 1.

Mr. ALIFAS. Yes, sir; it has. I will tell you, last spring the commandants at all the arsenals, upon instructions from the Chief of Ordnance, readjusted wages, and before this went into effect they had already put into effect drastic reduction in pay, and that reduction in pay was caused to a large extent by revising some of the rules that had theretofore obtained that were considered favorable from the employees' point of view.

For instance, in private shops, where they worked, say, 44 hours a week, 8 hours a day for 5 days a week and 4 hours on Saturday, it had been customary theretofore to divide the weekly earnings by 5½ in order to find what the per diem rate would be when applying it at the arsenal. The Ordnance Department changed that and divided the weekly earning by 6, so at the arsenal the employee had to work six full days to earn what he could earn in a private shop working only five and one-half days. Then they also

refused to consider railroad shops. Railroad shops at that time were receiving the highest average of pay generally, and before this went into effect the average pay for machinists in the arsenals was about 10 cents an hour less than the average rate obtaining upon the railroads.

Now, we were about to appeal to the Secretary of War against that decision when this ruling—or, I should say, when this became effective.

Senator WADSWORTH. This provision?

Mr. ALIFAS. This provision became effective, so that this provision made the new status just as unfavorable as the new rulings which had just been put into effect. So while we did not get any further reduction in pay to speak of, it did prevent us getting what we considered justice in the matter of having a fair scale for it.

In addition to that we also lost the bonus. At the present time at the Watervliet Arsenal, which is typical of the rest, the machinist receives an average of 66 and a fraction cents per hour.

Senator SPENCER. Eight hours' work a day?

Mr. ALIFAS. Yes, sir; and the railroads pay 77 cents. The railroad work is not considered as high grade work as is the arsenal work.

Senator SPENCER. They pay 77 cents an hour for 8 hours a day?

Mr. ALIFAS. Yes, sir. Now, the pay set at the arsenals at the present time is governed by regulations which have been issued by the Secretary of War, and those regulations are based on a law that was enacted July 16, 1862, for the navy yards. It provides that wages at the navy yards shall conform as nearly as is consistent with the public interest to those paid in private industries for the same classes of work. That was to be enforced by regulations of the War Department.

With your permission I would like to insert those regulations at this point. In effect, these regulations provide they shall pay the prevailing rates for similar classes of work.

✓ REGULATIONS FOR THE ADMINISTRATION OF THE CIVIL SERVICE IN THE ORDNANCE DEPARTMENT, UNITED STATES ARMY AT LARGE.

REGULATION XVI—RATES OF PAY.

1. When it appears necessary the commanding officer of any ordnance establishment shall, by correspondence or otherwise, make diligent inquiry of the principal private manufacturing establishments, not including employees of the United States Government in the vicinity of his post, which in his opinion should best furnish the comparison desired as to the rates of wages paid to the workmen of different grades in each trade or occupation for work of a similar nature and grade to that done at his post or resembling it as nearly as possible. The "vicinity" of the post is to be taken as the region lying within a boundary sufficient to insure similarity of conditions of employment and living to those at the point where the effort to fix the wages is being made.

2. In considering the wages paid for similar work by different manufacturers attention will be given to the size of the establishment, the amount of work being turned out, the nature of the material and tools in use, and the standard established for and the conformity thereto that may be exacted in the completed article; all of which points influence the compensation given workmen of even the same grade at different factories.

When a workman in a private establishment is habitually employed at one rate of pay upon different grades of work within his trade, his pay, for the purposes of comparison with that of arsenal employees of the same designation, will be considered as pertaining solely to the highest grade of work upon which he is employed.

3. The construction and good condition of tools in ordnance shops, the organization and methods adopted therein, together with the large number of an article usually being fabricated and the constancy of the employment, are elements to be compared with those in private establishments and to be given weight in considering the grade and compensation of workmen for the department.

4. If the result of the investigation by the commanding officer shows that changes are necessary to equalize the rates paid by him and those paid in the vicinity under the conditions applicable, he will submit to the Chief of Ordnance, for his action, a new schedule of wages, with reasons therefor, and at the same time will make a report showing in full what increase or decrease would be involved in the wages of any grade of any trade or occupation; and when said schedule is approved by the Chief of Ordnance it shall remain in force until further change is authorized, and shall be duly published for the information of applicants. Employees in Schedules C to H, inclusive, may be promoted or reduced by the commanding officer, provided a change of work is involved requiring a change of designation.

5. As far as practicable each distinct operation upon standard articles manufactured at an ordnance establishment will be graded so that the skill required for the accomplishment of each shall be known. Consideration will be given to the nature of the material employed, to the construction of the tools and the care and skill called for in their manipulation, to the perfection demanded in finish, and to the degree of variation permitted in dimensions.

Thus, the work of each operator would be graded according to the skill and efficiency required for its performance and the compensation for the grade would be established independently of the workman. An employee believed competent to perform the work should then be assigned to it and be paid accordingly, but he shall be relieved if found incompetent. Should there not be work of the proper grade for an employee whose efficiency is known and pay has been established, he will either be given work of a lower grade and pay, should he be willing to accept it, or be "furloughed" to await work of his own grade.

Senator SPENCER. Why should not the men at this Watervliet Arsenal get the same rate per hour, approximately, that those engaged in a similar class of work get with the railroad?

Mr. ALIFAS. Well, if there is anything to the rule that workmen upon an 8-hour day would accomplish about as much in the long run as they would in a longer workday, it ought not to be based on the hourly rate.

Senator SPENCER. Both the railroads and the arsenal are run on an 8-hour day, are they not?

Mr. ALIFAS. Yes. It is all right if they are working the same hours—then it makes no difference; but where the hours are different we maintain the per diem rate ought to prevail.

Senator SPENCER. As I gather from the illustration you gave, at Watervliet they are getting 66 cents an hour for eight hours' work a day, though the same class of men, though even of a little less skill, are getting 77 cents an hour in the railroad employment?

Mr. ALIFAS. Yes, sir.

Senator SPENCER. For an 8-hour day?

Mr. ALIFAS. Yes, sir.

Senator SPENCER. What is the reason for that? Certainly this law would allow an arsenal man to get as much as the railroad man.

Mr. ALIFAS. It would not interfere in that case, but the wages at the arsenal are not set exactly by what is paid in the railroad.

Senator SPENCER. I see. They take other industries?

Mr. ALIFAS. They take other industries that may work eight hours and may work longer. The regulations provide they shall pay the hourly rates.

Senator JONES. If the word "hourly" were cut out that would eliminate the objection?

Mr. ALIFAS. It would eliminate one objection, but the other objection is this provides the prevailing rate shall be the maximum, and we claim it should not be the maximum; it should be the daily rate.

Senator WADSWORTH. Suppose we substitute the word "daily" for "hourly" on page 102?

Mr. ALIFAS. That would eliminate one objection.

Senator WADSWORTH. It seems to me that is the most powerful objection, too.

Senator HARRIS. What else is important?

Senator WADSWORTH. He does not want the maximum.

Mr. ALIFAS. The other thing of importance is that this stipulates that the prevailing rate shall be the maximum, and it is a restriction on the appropriation. An officer who enforces this would want to be on the safe side all the time, and the safe side would be to pay a little bit less than the prevailing rates.

Senator JONES. Have you seen any indication of that being followed during the current year?

Mr. ALIFAS. Well, not directly; but there are other factors that they do not interpret on the liberal side. For instance, we are informed that in their surveys of the employment in the vicinity of arsenals they have accepted all sorts of machinists and have determined what the average of the pay is. Now, some of those men are doing a class of work very much inferior to that done at the arsenal, and yet that inferior work is given its weight. We believe if they were not held to the prevailing rate as a maximum they would be inclined to give us a little better basis.

Senator SPENCER. Mr. Alifas, if they do that, that is in violation of this provision which limits the comparison to a comparison with corresponding work in the same locality. They can not take inferior work as the basis of comparison.

Mr. ALIFAS. They can, because this does not say they shall pay the prevailing rate; it merely says they shall not pay more than the prevailing rate, and if they pay men at the arsenal who are doing a good grade of work the rate of pay of persons performing an inferior grade of work in the vicinity they are not violating this.

Senator SPENCER. No; they would not be violating that, but I understood your point was that in making up their minds as to what was the rate for that corresponding work in the locality you found they were taking into and making a part of their average inferior work.

Mr. ALIFAS. Yes, sir.

Senator SPENCER. Work that did not correspond with their work?

Mr. ALIFAS. Yes, sir.

Senator SPENCER. Just so far as they do that, they are violating this provision.

Mr. ALIFAS. They are not violating it, Senator.

Senator SPENCER. They are violating it in arriving at their conclusion as to what is the prevailing wage.

Mr. ALIFAS. If it said they shall pay the same pay for the same grade of work they would be violating it, but it does not say that.

Senator SPENCER. But I say when they make up their conclusion as to what they consider the prevailing rate under this provision of

law, all they can consider is the rate paid for corresponding work; that is, machinists paid for the same character and caliber and high class of work as obtains in the navy yard, or wherever else they are used. Now, when they get that prevailing rate fixed that is the only basis they can fix it on. That is my point. Your point comes in after that. It is quite true, as you have stated, that after they have that rate fixed they may have a tendency to lower it in order to bring themselves within the law, but if they follow the law in the fixing of it they can not consider anything except the same kind of work, corresponding work, the same class of machinists.

Mr. ALIFAS. Well, they would not be violating the law if they ruled as you have just suggested; but, on the other hand, since there is no law compelling them to pay the prevailing rate, they can pay employees at the arsenal as little as they can get them to work for, if they want to.

Senator SPENCER. I see.

Mr. ALIFAS. There is nothing to prevent their doing that.

Senator WADSWORTH. That would be in violation of the spirit of the regulations, though.

Mr. ALIFAS. That would be in violation of the spirit of the regulations; yes; but the law superseded the regulations. It would be different if this were a mere direction that they shall do thus and so, that carries no penalty with it, but this carries the possible penalty with it that the money is not available if it is spent contrary to the language, so that is a more powerful deterrent than the mere direction that they shall not exceed the prevailing rate.

Senator WADSWORTH. Is there anything else you want to call attention to?

Mr. ALIFAS. I would just like to call attention that this illustration that was used by Mr. Luce, which apparently was the determining factor in having it first adopted by the House—this young woman who was receiving \$25 a week from the Government—if her position was affected by this, then she would have to work for about \$14.82 a week; and in that event the gentleman to whom Mr. Luce referred could have gotten her to quit the Government service in order to go to work for him for \$18 a week, since he worked an hour and a half longer than the Government shop did, and that perhaps would result in the Government losing its best workmen, because, after all, the amount of money people make is often the determining factor in whether or not they remain; and so we think it would be bad practice for the Government to do that. And our Representatives are representing the Government; they are not representing the people who are trying to get employees away from the Government.

So if that is the purpose of this clause, we feel that it ought to be eliminated.

I was going to say that inasmuch as this was supposed to affect employees in the departments, the odds and ends that were not covered by wage boards, that it has already had its effect; wages have been deflated by this and there is not likely to occur anything to the contrary that would vastly increase wages again. The department has authority to extend these regulations to the whole service if they want to, and we think this language is unnecessary.

Senator WADSWORTH. Much obliged to you.

Mr. ALIFAS. I thank you very much, Mr. Chairman, and gentlemen.
(Whereupon the committee recessed until 2.15 o'clock p. m.)

AFTERNOON SESSION.

The subcommittee met, pursuant to the taking of the recess, at 2.15 o'clock p. m., Senator Wesley L. Jones (acting chairman) presiding.

STATEMENT OF SENATOR FRANK B. WILLIS, OF OHIO.

Senator JONES of Washington. Senator Willis, will you proceed?

Senator WILLIS. I have no formal statement to make, Mr. Chairman, but I understand the facts to be substantially as follows: The engineers estimated for these surveys \$225,000.

Senator McNARY. Are you talking about surveys?

Senator WILLIS. I think their estimate for the Ohio surveys, for a canal route from the Ohio River to Lake Erie, was \$225,000.

Senator JONES of Washington. And nothing else.

Senator WILLIS. Yes; for the canals and nothing else.

Senator JONES of Washington. The Budget office submitted an estimate of \$250,000 for examinations, surveys, and so forth.

Senator WILLIS. That was for the whole thing, including other surveys.

Senator JONES of Washington. Yes.

Senator WILLIS. Then the House committee cut it down, and subsequently the House added \$125,000 with the statement in the bill, making a total of \$325,000.

Now I assume that the members of the committee are all familiar with these three projects. There are three routes that have been investigated to some extent across the State of Ohio, one running from Toledo to Cincinnati on the line of the old Miami-Erie Canal; another running from Sandusky to Portsmouth, part of the way on the line of the old Ohio Canal; and the third running from Ashtabula to Pittsburgh.

I do not care at this time to go into the matter of the relative practicability of those routes. That is a matter for the engineers to determine. The only thing I want to say to the committee is that I do think it is highly desirable that those routes be surveyed and that the thing be determined, once for all, first, whether there shall be connection by canal between Lake Erie and the Ohio River, and secondly, if so, whether it is to be by the route from Toledo to Cincinnati or by the route from Sandusky to Portsmouth or by the route from Ashtabula to Pittsburgh.

The appropriation that is made in the House bill of an additional \$125,000 will, of course, not make it possible to survey those three routes, and the members of the committee realize the difficulty that will come up at once. Suppose the engineers say, as they could properly, that this will enable them to survey only one route. As a matter of fact, I violate no confidence when I say that this \$125,000 was put on in the House originally to furnish the means of surveying the Miami-Erie route—that is, from Toledo to Cincinnati. Then it was immediately said by Members who are interested in other routes, "If you are going to survey that one, others

have got to be surveyed," so that agreement was made that this should be left so that the engineers could use it for making a survey of all of them. But, as a matter of fact, they can not make the surveys for all of these routes for the \$125,000 provided.

Senator JONES of Washington. How much more should we have in this appropriation?

Senator WILLIS. My own judgment is that we should get this thing out of the way. It is a thing that has been up for more than a quarter of a century, and in view of the fact of the probability, in my judgment, that there will be action on the St. Lawrence waterway project, I think this should be settled once for all now. I think, therefore, that \$225,000 should be provided. That will make \$125,000 more than the bill provides.

Senator McNARY. Have any of the communities which this canal will benefit contributed in any way to the surveys?

Senator WILLIS. I do not know. I can not tell you as to that.

Senator McNARY. Do you distinguish between that and the actual construction, so far as a survey is concerned?

Senator WILLIS. Well, I should think there was a distinction. The determination of which of the three routes is best is a question that is national in its scope. The determination of the question of cooperation in the construction of the canal on the route determined rests on a different basis, I should say.

Senator FLETCHER. I think the State has contributed something on the survey of route No. 1.

Senator WILLIS. As a matter of fact, Senator—I think you are familiar with this—the State of Ohio had three canals connecting the Ohio and Lake Erie, running clear across there.

Senator FLETCHER. They have one now from Toledo to Cincinnati.

Senator WILLIS. Yes; but that is not in operation.

Senator FLETCHER. Would you use this other one if you had it?

Senator WILLIS. Of course, we think so. You could not use a canal of the kind that is there now. It is a little, old canal, with little canal boats. It would be perfectly idle to talk about constructing another canal or attempting to put the old canal in shape along the line on which it was built originally. It has got to be made, of course, a big-barge canal, in order to be practicable at all, and we want it determined which one of these three routes is the best, and I think it is important that it should be determined, especially in view of the great St. Lawrence deep-waterway project, in which all of us are interested.

Senator FLETCHER. General Taylor stated the other day that you would have to add \$150,000 to the House amount.

Senator WILLIS. Then the general has revised his opinion, I think. The statement in this letter dated March 15 was that the cost of these surveys was estimated at \$225,000.

Senator FLETCHER. No; but you have got to leave some funds for the other surveys.

Senator WILLIS. This \$125,000 was added really to take care of the Ohio end of it.

Senator JONES of Washington. Yes; but \$200,000 is said to be not nearly sufficient to do the ordinary surveys that ought to be done, and so the engineers now say they need \$325,000 for the purpose.

Senator WILLIS. I see. If it is proposed to use some of that \$125,000 in other surveys, no doubt the statement of General Taylor would be correct.

Senator JONES of Washington. Yes.

Senator McNARY. That leaves you \$75,000 to be used on these surveys.

Senator WILLIS. That really would not be an economical use of the public funds. The purpose of this survey is to get this question settled once and for all, first whether there shall be a connection between Lake Erie and the Ohio River, and, if so, which one of these three routes shall be adopted; and the additional \$100,000 I am asking for will take care of that and settle it.

Senator FLETCHER. How far is it on the Toledo and Cincinnati route?

Senator WILLIS. I have been over the route a great many times. It is not far from 200 miles.

Senator FLETCHER. You would have a canal about 200 miles long?

Senator WILLIS. Yes; and the distance over the route from Sandusky to Portsmouth would be practically the same. The distance on the route from Pittsburgh to Ashtabula would be very much shorter.

Senator FLETCHER. What width and depth do you contemplate?

Senator WILLIS. That is a matter that I would not want to give any estimate on.

Senator FLETCHER. Twelve feet, I think.

Senator WILLIS. Yes; it has got to be a barge canal. The day of little canals is past and gone. That is a little canal there.

There is not anything else that I care to say, unless some member of the committee desires to make inquiry of me. I think it is an economical use of the public money to set aside an additional \$100,000 for this purpose and get that question settled and out of the way.

Senator JONES of Washington. That is certainly true, if any survey is to be made at this time.

Senator WILLIS. Yes; and a small amount does not amount to anything. The purpose of this survey is to settle a question. If you are not going to settle that question—my constituents, perhaps, would not thank me for saying this, but I say if you are not going to settle this question—it does not accomplish anything from a national standpoint to fiddle around with a few thousand dollars.

Senator JONES of Washington. Are there any questions?

Senator WILLIS. I thank you very much.

STATEMENT OF BRIG. GEN. HARRY TAYLOR—Resumed.

Senator SPENCER. General Taylor, you were here the other day. I want to ask you a question or two about the matter generally.

Senator WILLIS. May I remain for a bit, Mr. Chairman? I would like to hear the general's testimony.

Senator JONES of Washington. Certainly.

Senator SPENCER. General Taylor, the House bill has made appropriation of \$42,000,000 for river and harbor work to apply on those projects already adopted. As I understand, that is the estimate that your office submitted to the Budget Office.

General TAYLOR. That was the amount we stated could be economically used; yes, sir.

Senator SPENCER. That was not your estimate at the start?

General TAYLOR. The amounts stated by the district engineers, that came in to us indicated that a little over \$63,000,000 could be advantageously used. We went over the reports with a great deal of care and cut out everything we thought could be reasonably deferred, in view of the appeal made to us to use economy, and we cut the total to about \$42,000,000. That was the minimum that we could get along with and take care of urgent needs.

Senator JONES of Washington. That was the estimate of your office?

General TAYLOR. Yes, sir.

Senator JONES of Washington. I understood your district engineers recommended \$63,000,000.

General TAYLOR. Yes.

Senator JONES of Washington. And you cut it to \$42,000,000?

General TAYLOR. Yes.

Senator JONES of Washington. You explained to the House committee fully the different items for which this estimate was made?

General TAYLOR. Yes; I spent five full days, I think, before that committee, going over each item in detail.

Senator JONES of Washington. The Director of the Budget Bureau submitted an estimate of a little over \$27,000,000, and then the House committee added \$15,000,000 to that, and brought it up; so that there is where they got the estimate submitted by the Budget to Congress.

Senator McNARY. The \$27,000,000 submitted by the Budget officer was after he had considered the estimate of the Board of Engineers?

Senator JONES of Washington. Yes. Now, General, has the situation changed any since you gave your testimony to the House committee?

General TAYLOR. It has only changed in this respect, that the necessity for \$42,000,000 is known to be greater now than it was at the time I gave my testimony. I will not take the time to go into many cases, but I can give you one case that has come up. We have a project in Los Angeles known as the flood diversion project. The work done there was in the nature of the construction of a levee and a diversion channel, which diverted the Los Angeles River away from Los Angeles Harbor. That was for the reason that when the periodical floods occurred they brought down large amounts of sediment into the harbor. On one occasion when a flood occurred a few years ago so much sediment was brought down that there was less than 5 feet of water in the harbor at a place where there had been 35 feet before the flood. It practically destroyed the usefulness of the harbor until it could be redredged, and it was quite a costly project as well.

The flood diversion project was practically completed last fall. On account of there being less money available for the work than we had originally estimated, we were obliged in certain places to cut down the amount of revetment that we placed along the sides of the channel. During November or December a flood occurred, which had such an effect upon this channel that it nearly broke through the levees. Unless we can obtain additional money for that work there will be great danger that another flood next year would break through and would destroy a large part of the work which we have

done, and might seriously affect the harbor, and altogether have disastrous effects. The amount which we will need for use on that work will be approximately \$350,000.

I may have brought that out before. I just said that had come up since my testimony before the committee. I now remember that it occurred prior to my testimony before the committee, and I believe I referred to it. I had in mind particularly what had occurred since the estimate was submitted of \$42,000,000. There is nothing that I remember that has occurred within the past month or two to change my testimony.

Senator JONES of Washington. You do not think that we could safely reduce this amount here?

General TAYLOR. I do not; no, sir.

Senator JONES of Washington. You think that the necessities for the preservation of the interests of commerce require at least this amount of money?

General TAYLOR. Yes; I certainly do.

Senator JONES of Washington. What would you think of the suggestion to make this apply to any additional projects that might be approved during this session of Congress and adopted?

General TAYLOR. It would place us in rather an embarrassing situation, because if Congress adopts projects that are included in the pending bill it would mean a very considerable allotment for carrying on those projects which would, by just that amount, reduce the amount we would have to apply to the old projects. All of our estimates have been made on the basis of carrying on work on the old projects. If we now have to take five or ten millions of dollars and apply it to the new projects, it makes it that much more difficult to carry on the work on the old projects.

While I regard some of those new projects as of extreme importance, and I should be very glad to see work prosecuted under them, unless the committee should increase the amount of \$42,000,000 by a sufficient amount to let us apply it to the new projects I should feel some hesitancy in recommending such action.

Senator JONES of Washington. You think it would be the wiser course to allow those projects to go over until the next appropriation bill?

General TAYLOR. I do, yes, sir: as much as I would like to see work go on on them.

Senator JONES of Washington. Unless this amount was increased?

General TAYLOR. Yes, sir.

Senator JONES of Washington. Then, judging the future by the past, we will have another river and harbor appropriation before the 4th of next March?

General TAYLOR. Yes.

Senator JONES of Washington. And those appropriations are usually made immediately available.

General TAYLOR. Yes, sir. And really, as a matter of fact, Senator, it would not delay the prosecution of work on those projects very much, because if they are adopted by Congress we can then go ahead with our preparations; we can get our specifications ready for issuance as soon as money for the work on projects becomes available. Some of them require new plant. We can be designing the plant and getting all ready to start work.

Moreover, the money to be appropriated at this session will become available when we are well along into the working season. We will have lost a part of the working season anyway. If we take the new work up next year we will be ready to take it up early in the spring, so that we can get in a good season's work, and there would be practically no delay.

Senator McNARY. Are you talking of the Sheppard proposition, which would make this available for new projects?

Senator JONES of Washington. Yes.

General TAYLOR. Speaking of Senator Sheppard, I assume that he is the most interested in the Galveston sea wall project. I regard that project as one of the most urgent that we have before us. That is for the protection of the harbor against possible damage by hurricanes. The hurricane season comes in July and August. We could not possibly finish the sea wall in time to protect the harbor from hurricanes this season. If that project is adopted and the money becomes available by the 1st of next March I think we can finish it before the next hurricane season.

(At this point Senator Wadsworth assumed the chair.)

Senator WADSWORTH. You say the 1st of March?

General TAYLOR. Yes; I am assuming that another bill will go through during the next short session, and if we can get the money by the 1st of March we can probably complete the work by August. If a hurricane should catch us with the work half completed it would be worse than if no work had been done.

Senator JONES of Washington. Now, with reference to this Ohio survey, what have you to say about the suggestion that unless we appropriate enough money to make all three of these surveys and determine which route is the best, it would not be wise to make any?

General TAYLOR. I think undoubtedly the whole amount should be made available.

Senator JONES of Washington. That is, there should be enough for all three?

General TAYLOR. Yes. It is a question which of these routes shall be selected, if any. Having one complete survey would not help us, because all we could say would be that we know nothing about the others.

Senator JONES of Washington. How much money should be appropriated for the surveys, assuming we provide for the Ohio surveys?

General TAYLOR. There should be \$150,000 additional to the amount now carried.

Senator JONES of Washington. That is \$475,000?

General TAYLOR. Yes, sir. I explained to the committee the other day, I think, the necessity for the full \$250,000 for the general surveys and the contingencies that we are obliged to pay for out of that appropriation.

Senator JONES of Washington. Yes; that is what I understood.

Senator FLETCHER. Does that survey contemplate including a list with the cost of each, so that we can determine whether it is advisable to adopt either project?

General TAYLOR. Yes; we expect with that money to have complete data to act upon, to decide whether any canal shall be built, and if so, which, and the complete data as to the cost of the canal.

Senator FLETCHER. Do you remember, General, in the river and harbor bill that is now pending about how much that will call for if we adopt those projects?

General TAYLOR. The estimated cost of the completion of all those projects is about \$31,000,000. The amount that is recommended as a first appropriation for those projects is about \$11,000,000.

Senator FLETCHER. So that if we adopted the amendment here we ought to add \$11,000,000 to this bill?

General TAYLOR. Yes, sir.

Senator HARRIS. You think some of those projects are more important than the ones you have spoken of?

General TAYLOR. Yes; I do, Senator; but, as I said, there will be comparatively little difference whether the money is appropriated for them now or at the next session, because as soon as they are adopted by Congress we will go right ahead with preparations for commencing work on them, and there will be no time lost next spring.

Senator McNARY. In your estimate in the annual report of the Chief of Engineers you asked \$42,000,000, which the House allowed you?

General TAYLOR. Yes.

Senator McNARY. In that you specify various improvements and also designate the amount of money which you think will be required to complete the improvements?

General TAYLOR. Yes.

Senator McNARY. If the sum of \$27,265,000 as submitted by the committee to the House should be allowed you by the Senate, you would have to make deductions from these estimates set forth in this report?

General TAYLOR. The amounts, of course, would have to be scaled down so as to come within the \$27,000,000.

Senator McNARY. But in the scaling down would you scale down in proportion on each project or complete certain things and defer others?

General TAYLOR. There are certain things that are more important than others. There are others that we could not scale down, and which would have to get all or nothing; so that we would have to go over all the projects and reconsider them on the basis of what we had to allot.

Senator JONES of Washington. And consider which was the best way, as you thought, for the interests of commerce?

General TAYLOR. Yes.

Senator McNARY. Here is one item that I refer to on page 104 of the House hearings: The Coquille, Coos, Siluslaw, and Yaquina Rivers, and Coos, Tillamook, and Nehalem Bays, Oreg., \$523,000. There is nothing there to indicate to me what sum of money is to be spent on any particular river or harbor or whether, if they should be scaled down, there would be a continuation of work on one and a ceasing of work on another.

General TAYLOR. That is something that I can not answer. We would have to take the matter up and get a report from the district engineer and get his advice, after consultation with the local interests, as to how the money could be best used.

Senator McNARY. Of course that could not be determined until it is determined as to what amount Congress is going to give.

General TAYLOR. No, sir. Then they would go over it with the local navigation interests and determine how to best use the money given.

Senator McNARY. Assuming that the Congress would allow this \$42,000,000, which is according to your estimates, have you then estimates showing the amounts to be expended on these various items included under one large sum?

General TAYLOR. We have in the annual report of the Chief of Engineers. You will find under each improvement a statement, of which the statement you are referring to is simply a summary.

Senator McNARY. That is all that I wanted to know.

General TAYLOR. But of course those would be subject to some variation. That was the estimate that was made last June. In the meantime conditions have so changed that we could not stick to that absolutely. While that would be used as a guide, nevertheless there would be variations from it. Not many, however, as a general rule.

Senator FLETCHER. I had understood that the Chief of Engineers would be unwilling to state precisely how this \$42,000,000 was to be used.

General TAYLOR. That is correct.

Senator FLETCHER. Because, in the first place, he did not know what the amount finally might be. It might be a little more or it might be a little less, and he could not very well specify in advance of the appropriation how he was going to use it.

General TAYLOR. That is perfectly correct.

Senator FLETCHER. So that you are not absolutely bound?

General TAYLOR. No; we could not be. At Los Angeles, for example, there is no estimate in the annual report. I know of half a dozen other cases where, from data we now have, we know that the best interests of commerce would require a change of the amount given in the annual report. In other words, we are nine months further along than we were when the estimate was made.

Senator FLETCHER. You would feel at liberty to vary somewhat from the figures given in the House hearings, as to the use of this money?

General TAYLOR. Yes; we stated all along that that would be the basis of our allotments, but that variations would be necessary.

EAST RIVER PROJECT.

Senator WADSWORTH. What report of progress have you to make on the East River project in New York?

General TAYLOR. We are getting along very well there. Only a small allotment has been made since 1919; so that no additional contract has been made recently. I say no additional contract; no additional large contract for rock removal has been made. The work is fairly well completed up as far as the navy yard. There is still some additional work to be done west of the navy yard. We have been working on the channel between Governors Island and the Battery, and east of Governors Island, between Governors Island and the navy yard. We are also working at Hell Gate itself.

Senator WADSWORTH. That is what I wanted to inquire about especially.

General TAYLOR. Yes.

Senator WADSWORTH. Under the \$42,000,000 appropriation, I see you would allot \$2,200,000 to East River.

General TAYLOR. That was in the annual report; yes.

Senator WADSWORTH. That would permit you to continue the work at Hell Gate?

General TAYLOR. Yes, sir. There is a recommendation, Senator, as perhaps you know, that that project be modified by reducing the authorized depth east of the navy yard from 40 to 35 feet.

Senator WADSWORTH. Yes.

General TAYLOR. That would save a large amount of money—\$33,000,000; and not only that, but it would reduce the time in which the work can be completed by from 8 years to 10 years, and will, we believe, give commerce every advantage that a 40-foot project will give. I think, of course, there are two very great advantages in that. First is the saving of money, and the next is the saving of time. The conditions in the East River are such that only a limited amount of work can be done there in a year. If we had the entire amount of money that the 40-foot project is estimated to cost there, only a limited amount of work could be done in a year, because the traffic conditions are such that only a limited amount of plant can be used in the river. As it is now, there is great danger of collision there. In fact, the plant at Hell Gate has been run into many times, and it has been sunk two or three times, and we could not put another plant there at the present time.

Senator SPENCER. General, I am naturally intensely interested in the Mississippi River, and also in the Missouri River, and incidentally in the whole scheme of inland waterways transportation. I presume there are few men, if any, who know as much about the whole scheme of inland waterway transportation in the United States as you do.

General TAYLOR. Thank you.

Senator SPENCER. Suppose that we were sitting around this table to-day as a board of directors of a civil corporation owning these waterways, and you were not an Army officer, but you were the consulting engineer, and we were to say to you, "We want to proceed with that problem of inland waterways as economically as we can possibly do it, but we do not want to sacrifice to economy efficiency." Would this \$42,000,000 that has been suggested meet the requirements of efficient operation and development—principally development—and protection of the inland waterways on an economical basis, or is much more necessary?

General TAYLOR. If we are going at it with the idea of finishing all the projects which have been adopted by Congress as promptly as possible, I would say that the \$42,000,000 would not be sufficient; that we ought to have the amount we stated originally, of \$63,000,000. That would give us all that we could, I think, economically spend this next year.

Now, of course, you are asking what would be an economical amount to spend.

Senator SPENCER. What I mean is, I do not mean to complete or to pursue work that can be left over to another year without serious loss.

General TAYLOR. Yes.

Senator SPENCER. But, of course, I mean to do such work as may be necessary, in the efficient administration, to do now. If there is a problem that can remain intact until next year or the year after, I should say that is not an emergency.

General TAYLOR. I think that the \$42,000,000 will answer that purpose. I will give you just one case to show you how we cut down from \$63,000,000 to \$42,000,000.

The first project on the list was Portland Harbor, Me. Almost in the center of the channel at Portland is a large rock, which is necessarily an obstruction to navigation. It will cost about \$100,000 to take that rock out. It has been buoyed so that navigators know it, and they generally avoid it. It is desirable that that rock should be taken out, but it has been there all these years and navigators have got along, and so decided they could get along another year and we would not put that \$100,000 in this time. It is something that ought to be done.

Senator SPENCER. But not necessarily now?

General TAYLOR. No; not necessarily now. The sooner it is done the better. It was a case of cutting down and cutting out of everything that was not in the nature of an emergency, or was not actually required for existing navigation, and we thought that that was something that could be reduced.

Senator SPENCER. Are there many items similar to that, where river channels are constantly shifting?

General TAYLOR. That, of course, is the case of a permanent rock. There has been no shifting in the channel there.

Senator SPENCER. Of course not.

General TAYLOR. Yes; there are a good many of that kind.

Senator SPENCER. What was in my mind is that in the rivers, where there is the shifting and filling, if a complete revetment or a complete protection of the channel was not instituted, the work of one year and the money expended in that year was, by virtue of the very fact that it was not completed, practically lost before another year came, so that you would have to do over again what you had done.

General TAYLOR. That is correct.

Senator SPENCER. An extract from the report covering the condition of the Mississippi River from St. Louis to Cairo was read here the other day in which it was shown that unless appropriations were made, all the work that had been done in that portion of the river would be lost in a few years. Will that \$42,000,000 take care of that?

General TAYLOR. That will probably take care of that.

Senator HARRIS. Under this appropriation, Savannah and Brunswick and work like that will be maintained, will it?

General TAYLOR. Yes.

Senator HARRIS. I mean under the \$42,000,000 appropriation of the House?

General TAYLOR. Yes; it will be maintained.

Senator JONES of Washington. Senator Ransdell, do you desire to say anything?

STATEMENT OF SENATOR JOSEPH E. RANDELL, OF LOUISIANA**TRANSPORTATION FACILITIES, INLAND AND COASTWISE WATERWAYS.**

Senator RANDELL. I wanted to say just a few words about the item of transportation facilities, inland waterways, on page 45 of the bill. I do not know that I can add anything at all to what was said by Mr. Theodore Brent who was before you last week, but I do wish to indorse everything he said, and to urge as strongly as I can the appropriation of the additional \$300,000 which was urged by Colonel Ashburn and Mr. Brent. I have taken the greatest interest in the barge line on the Mississippi and the Warrior system, or the two barge lines. I think the whole Nation is tremendously interested in seeing a success made of that enterprise. It is the only place in the Nation where that is being tried out, and it would be unfortunate, in my judgment, if we did not carry it along with reasonable appropriations so that its success or failure can be demonstrated. It is my understanding that they are getting along pretty well on the Mississippi River, and have now about reached a self-sustaining basis.

The conditions on the Warrior have not been anything like as favorable as those on the Mississippi, and they are not on a self-sustaining basis, as Mr. Brent testified, nor can they hope to be within the next few months; but they will become very much closer to that basis as soon as the big industrial canal is opened at the city of New Orleans, and New Orleans and the lower river is tremendously interested in having coal brought in as cheap as possible from the Warrior fields down through that canal, the Lake Bourne Canal, and the big lock leading from that canal into the Mississippi. They can not go through there now, and it is a very expensive proposition. We have every reason to believe that it will be completed in the next few months, and I believe, as I say, that it would be very unwise not to give this line the additional money which it is said is necessary, not to operate but to insure operation, because I am told by Colonel Ashburn and Mr. Brent that they do not think they will have to spend that \$300,000; but an accident might occur and they would have no money to operate on unless you give them the money. It is an insurance fund.

I traveled a little way on the Warrior River the other day with the Senate committee that went down to examine the Muscle Shoals, and I was carried away with a fact presented to me which I had never observed before, although I had heard of it—that the coal juts out along the banks of that stream for a distance of 180 miles. We saw coal being shunted down into barges there from the mines. I do not know what they call it, but they were just running it right down into the barges. They say there is 180 miles of that. It looks to me like it ought to be comparable to the famous coal beds on the Monongahela, which have done so much to build up the city of Pittsburgh.

Right in that section barges are now being operated, and they are bound to become on a paying basis some day. How long it will be I can not say; but I assure you it will be a great mistake not to continue the operation of that line, and I sincerely hope you are going to give them this money.

Senator FLETCHER. They want \$370,000 added to the bill?

Senator RANDELL. Yes; that has been requested by the War Department.

Senator FLETCHER. Did not the Secretary of War recommend that?

Senator RANDELL. Yes; he recommends that.

Senator WADSWORTH. That is, the estimate of \$330,000.

Senator FLETCHER. The Secretary of War sent a special recommendation?

Senator RANDELL. I think he sent a special letter recommending it.

Senator WADSWORTH. Yes.

Senator RANDELL. He is strongly favorable to it, and it ought to be done.

General TAYLOR. Before you leave that, right in connection with what Senator Ransdell was saying, you asked the other day that a copy of the contract with Mr. Goltra be inserted in the record. I have a copy here.

Senator SPENCER. That is in the record.

General TAYLOR. That is what I thought—that it was in the record.

Senator SPENCER. Except the last, supplemental contract. You will find Goltra's contract on page 205 of the House hearings.

Senator JONES of Washington. What we were anxious for was the approval given on the 4th of March.

General TAYLOR. I have that here.

Senator JONES of Washington. That is what we want in the record.

General TAYLOR. That is Mr. Goltra's letter asking that a rate of 50 per cent of the all-rail rate be fixed for his line, the same as is in vogue on the lower river. I have here his letter; and here is a letter that I sent as Acting Chief of Engineers, and Mr. Baker's approval on it.

Senator JONES of Washington. That has not been put in the record. Put those in the record.

Senator SPENCER. General, please cast your eye on page 205 of the House hearings and see if, with that and those you have there, we have not got the whole thing.

General TAYLOR. Yes, sir.

(The papers referred to by General Taylor are here printed in the record, as follows:)

WASHINGTON, D. C., March 2, 1921.

Gen. LANSING H. BEACH,

Chief of Engineers, Washington, D. C.

(Attention General Taylor, assistant.)

SIR: I am asked by various river cities to quote a definite rate to them for transportation of commodities by means of the boats and barges being constructed under my Government contract. The different municipalities are in the process of installing terminal facilities, and find that it is necessary to have definitely set forth by the Secretary of War what rates they may expect.

I respectfully suggest that I be authorized to quote them the same rates as obtain on the Government barge line now operating on the lower river, viz, 80 per cent of the all-rail rates that now obtain.

Will you be good enough, if you approve of my suggestion, to communicate with the Secretary of War, notifying him of same?

Very respectfully, yours,

EDWARD F. GOLTRA.

WAR DEPARTMENT.
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, March 3, 1921.

From: The Chief of Engineers, United States Army.
To: The Secretary of War.
Subject: Contract with Edward F. Goltra.

The contract entered into May 28, 1919, between the United States, lessor, and Edward F. Goltra, lessee, concerning the operation of towboats and barges on the Mississippi River, contains a covenant as follows:

"That the said lessee shall operate as a common carrier the said fleet of 3 or 4 towboats and 19 barges upon the Mississippi River and its tributaries for the period of the lease and of any renewals thereof, transporting iron ore, coal, and other commodities at rates not in excess of the prevailing rail tariffs and not less than the prevailing rail tariffs, without the consent of the Secretary of War: * * *"

It is represented by the lessee that it would be advantageous to the operation of the vessels if the rates of transportation should be fixed at 80 per cent of the prevailing rail tariffs. These are the rates charged on the Government line now operating below St. Louis, and, in my opinion, it would be in the interest of the shipping public to permit the same rates to be charged on this line. I accordingly recommend that the Secretary of War give his consent thereto.

H. TAYLOR,
Brigadier General, Corps of Engineers,
Acting Chief of Engineers.

Approved.

BAKER.

MARCH 4, 1921.

WAR DEPARTMENT.
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, March 10, 1921.

Mr. EDWARD F. GOLTRA,
Care of Mississippi Valley Iron Co.,
LaSalle Building, St. Louis, Mo.

Subject: Rates on barges.

SIR: Referring to your letter of the 2d instant, in reference to the rates to obtain on the barges owned by the Government and to be operated by you under your contract of May 28, 1919, with the Chief of Engineers, you are advised that your suggestion that the said rate be fixed at the same rates now obtaining on the barge line operated by you, namely, 80 per cent of the all-rail rates, was approved by the Secretary of War on the 4th instant.

For the Chief of Engineers.

THOMAS M. ROBINS,
Major, Corps of Engineers.

General TAYLOR. I might add also something that I did not know at the time I inserted the contract in the record, that the contract was drawn up in the office of the Judge Advocate General of the Army and the retained copy there shows each page of the contract initialed, I think by four officers of the Judge Advocate General's office, and it was all submitted to the Secretary of War with a letter submitting their views as to the contract as a legal document, and that as to whether or not it should be executed was a matter of administration as to which they expressed no opinion.

Senator FLETCHER. With reference to these figures, I might call your attention to a few details in matters that I want particular information about. For instance, in your report, at page 752, part 1 of your report of 1921, you estimate the St. Johns River, Jacksonville to the ocean, to require \$864,520; Jacksonville to Palatka, \$30,000; St. Johns River, Fla., Palatka to Lake Harney, \$78,000; Lake Crescent and Dunns Creek, Fla., \$25,000; Oklawaha River, Indian River.

maintenance, harbor at Miami, \$40,000; and the Caloosahatchee River, \$25,500. That considerably exceeds this estimate of \$696,000, which is given in this list to be covered by this appropriation. The question would be whether you would be authorized, and would feel justified, to increase the amount to be used on the St. Johns River, Lake Crescent and Dunns Creek, and Oklawaha River in accordance with your report rather than in accordance with these figures here.

General TAYLOR. Those figures make up the \$27,000,000, do they not?

Senator FLETCHER. No; that is the \$42,000,000. That would only give you for the St. Johns River, Lake Crescent and Dunns Creek, and Oklawaha River \$696,000, if that is so; whereas, according to your report, there would be \$864,520 plus \$30,000, plus \$20,000, required by those contracts.

Senator JONES of Washington. He has probably found that some of those he could scale out.

General TAYLOR. Of course we would have to take care of that. Senator, dependent on what money we had, and we would have to give them as nearly as possible what is necessary.

Senator FLETCHER. Some of those projects, I know, require the use of some money right away. In the upper St. Johns they are striking bottom there.

General TAYLOR. Senator, the amounts given in the money statement as the amounts that can be profitably used the next year, I think, will total up the same as it appears in the hearing; is not that so?

Senator FLETCHER. No. If you will turn to page 752 of your report you will find that you have estimated the St. Johns River from Jacksonville to the ocean requires \$864,500. That is more than your total estimate—

General TAYLOR. That was what the district engineer said, and that was the part that he could use of the total that came to \$63,000,000. If you turn to page 754, which is the Chief of Engineers' statement of the amount that can be profitably used, you will find the total there is \$588,000, and not \$864,000. That \$864,000 is included in the items that made up the \$63,000,000.

Senator FLETCHER. I see. That would give you a somewhat larger amount to use on the upper river?

General TAYLOR. Yes; that would be \$588,000 for the St. Johns River from Jacksonville to the ocean, and the next, Jacksonville to Palatka, \$30,000, and from Palatka to Lake Harney, \$78,000.

Senator FLETCHER. Yes.

General TAYLOR. That makes up the \$696,000.

Senator FLETCHER. Then the other items, later on, at Key West, etc.—

General TAYLOR. You will find all of those in the money statement. The amount that is given as the amount that can be profitably expended in the next year will correspond to the amount in the table to which you are referring.

Senator FLETCHER. That is all I have to ask now, Mr. Chairman.

Senator WADSWORTH. We are much obliged to you, General.

(Whereupon, at 2.50 o'clock p. m., the subcommittee adjourned until to-morrow, Tuesday, April 25, 1922, at 10.30 o'clock a. m.)

WAR DEPARTMENT APPROPRIATION BILL, 1923.

TUESDAY, APRIL 25, 1922.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10.30 o'clock a. m.

Present: Senators Wadsworth (chairman), Warren, Jones of Washington, Spencer, Weller, Fletcher, and Harris.

STATEMENT OF HON. JOHN W. WEEKS, SECRETARY OF WAR.

Gen. John J. Pershing, United States Army, Chief of Staff, appeared.

The CHAIRMAN (Senator Wadsworth). Gentlemen, the Secretary of War is here, and the committee, of course, will be glad to hear him on any matter pertaining to the War Department appropriation bill.

ADEQUATE PROVISION FOR THE ARMY.

Secretary WEEKS. Mr. Chairman, if an economist should analyze the operations of the American Government since its foundation, he would find that most of its wasteful expenditure and most of its burden of debt have been due to unbusinesslike methods in the conduct of its military establishment. We have entered each war with our national defense system unorganized. This has required an extemporized organization, thrown together in great haste, resulting always in excessive expenditure and excessive economic disturbance. In each war we have consistently adhered to the policy of forming a great citizen army to reinforce our small Regular Establishment; but in the absence of any definite plans the process of forming this citizen army has been one of confusion, disorder, delay, and extravagance.

We escaped national defeat in the Civil War because the Confederacy also had to extemporize an army before it could fight. We were able to take an effective part in the World War, in spite of our initial weakness, because our allies were able to cover us during the period of extemporization.

In the Civil War, with great expenditure of wealth and energy, we finally created a great national citizen army; but after that war no steps were taken to see that a portion of that expenditure was conserved for the protection of future generations.

After the World War, however, there was a great public demand, voiced largely by our returning veterans, that this defect in our national machinery should be corrected. The national defense act of

1920 was the congressional response to this public demand. It is the first comprehensive military legislation in our history. It provides for the organization, in framework, of an adequate citizen army in time of peace and for a regular establishment only large enough to make the training and development of the citizen army effective and to perform certain special duties that can be performed only by detachments of professional soldiers.

In considering the War Department's estimates from the standpoint of national economy we should not overlook the fact that the national defense act itself is a great economic measure deliberately designed to provide adequate national defense at a minimum of cost. In preparing its estimates for the fiscal year 1923 the War Department has had the national financial situation constantly in view. Every effort has been made to cut expenditures as low as may be done without seriously checking the development of the military policy embodied in the law. Full development has not been attempted. Every necessary activity has been curtailed as far as may safely be done without a permanent check to growth.

The allowances made by the House of Representatives in the Army appropriation bill are below safe minimum requirements; and as they will result in checking the most conservative and modest program of development I am convinced that they are inconsistent with the requirements of real economy and sound business principles.

I am aware that important international adjustments have been made during the past year, and I am confident that the prospects of continued peace are greatly brightened; but arrangements of this kind do not abolish war. They affect the probability of war in the immediate future, but they do not affect the fundamental requirement that if war should come we must be prepared to meet it with a full and timely development of the Nation's war power. Better international understandings affect the imminence of war and the time permitted for military expansion. They thus affect the size and cost of the peace establishment but do not justify the abandonment of the necessary machinery for developing the citizen army and providing reasonable facilities for voluntary military training. So far as legitimate reductions in the peace establishment are concerned, we have conformed to the new international situation. The national defense act authorized about 18,000 officers and 280,000 enlisted men. We ask for 13,000 officers and 150,000 enlisted men. To reduce the regular establishment to 11,000 officers and 115,000 men, as provided in the House appropriation bill, will not only give us inadequate regular garrisons but will seriously check the development of the citizen components of our national defense system.

I am aware of no issue that at the present time threatens to involve us in international complications. Our relations with all the great powers of the world are normal. There is no evidence of foreign designs against us. We must, however, recognize that throughout the greater part of the world a condition of instability prevails which renders the permanence of world peace very uncertain. In Europe nations are seeking to strike a new balance of power, and new combinations are being formed which will have a far-reaching effect on world relations, but whose ultimate import no man can foresee. In none of these combinations has America any direct interest. Nevertheless, it would be the height of imprudence not to recognize

that from them conditions may evolve which would gravely affect our national security. We do not know from what source or in what manner pressure may be brought to bear against us, but it is certain that to remain weak and unprepared in the face of such a situation is to invite aggression. It is, moreover, essential not only that we maintain a reasonable state of preparedness but that it should be a matter of international knowledge that we are so prepared. There should be no misapprehension either as to America's ability or as to her intention to defend herself against aggression or infringement of her just rights. To assure this degree of preparedness without undergoing the prohibitive expense of large standing establishments is the primary object of our organization under the national defense act.

What the Army needs now more than any other requirement is stability. In order to carry out its mission there must be some fixity of policy and definiteness of organization. After Congress fixes the number of officers and enlisted men, there must be a careful organization and allotment of the authorized personnel, so that the force as a whole can train for and perform the duties assigned it by law. After such an adjustment has been made, any arbitrary further cut in strength is only an apparent economy. The immediate saving in pay and rations is largely offset by necessary reorganizations and redistributions, and real economy and efficiency are further disturbed by necessary shifts of personnel to new stations and new duties. This disadvantage is serious enough if the Regular Army only is considered, but when we bear in mind that the officers of the Army are now charged with important new duties in developing the National Guard, the reserves, and the system of voluntary training, when we bear in mind that many new officers must themselves receive special training for their manifold duties, the serious consequences of frequent reorganization must be apparent to any man with business sense. Reduction of strength must involve readjustment and redistribution, with unsettled training and employment, unless the Army is to abandon some of the activities assigned it by law.

Officers in the regular service enter it with the purpose of continuing during the military years of their lives. Every officer is now wondering what his fate may be in the threatened readjustment. He can not do his best work under such conditions and if this situation is to continue from year to year, it must have a serious effect upon the development of our whole system of national defense.

I have been speaking primarily of the Regular Army; but the efficiency of the Regular Army has a direct bearing on the National Guard and the reserve forces. Any man who has served with the National Guard during the last 40 years, and is familiar with its qualities to-day and its hoped-for qualities in the future, will testify that there have been rapid advances in its efficiency. To a considerable extent, these advances are due to instruction and guidance obtained from the Regular Establishment. It is the purpose of the present law and of the War Department in carrying out that law, that this instruction and guidance shall be continued and increased, with the view of preparing the National Guard throughout the country for its important place in the first line of the national defense. The House appropriation bill makes inadequate provision for the healthy growth of the National Guard and for its proper field training.

The present strength of the Officers' Reserve Corps is about 65,000. Many of these officers have been assigned to local units of the Organized Reserves. In the event of serious military emergency, requiring greater forces than those contained in the Regular Army and the National Guard, the law provides for the employment of this force. The complete organization and equipment of the Organized Reserves in time of peace is not contemplated; but it is proposed to provide each local unit with reserve officers and noncommissioned officers, so that in the event of war a prepared and organized framework will be ready to receive and train the levies of new recruits in each community without loss of time. The expense of maintaining this great national organization in time of peace will be very small. The main requirement is the occasional assembling of reserve officers for short periods in order to keep up their training and to familiarize them definitely with the duties they are to undertake upon mobilization. Without some definite program of this kind, it will be impossible to maintain the interest of this valuable body of reserve officers. As no adequate provision has been made for the training of these officers since they terminated their active war service, the War Department has asked for sufficient funds to call out 20,000 of them, or less than a third of their total number, for 15 days' training. The estimates also provide for a limited number of reserve officers to serve for longer periods than 15 days on the General Staff, at the Service Schools, and as instructors at training camps. For all of these purposes the House appropriation bill allows only \$250,000. In response to the War Department's request for the funds to train 10,000 enlisted reservists for 15 days, the House bill allows \$100.

Our Officers Reserve Corps is largely composed of veteran officers who have served in the recent war. As this valuable body of experienced officers must gradually disappear as time goes on, our law wisely provides for military training in the schools and colleges and at citizens' military training camps, so that the Officers' Reserve Corps can be maintained and perpetuated. By this means we hope, as the veteran officers gradually become unavailable, to replace them at the bottom of the list by younger men who have received adequate training. Indeed, we should train more than would be required for replacement purposes, as the present number of reserve officers is much less than would be required in a great emergency.

Both the Reserve Officers' Training Corps and the Citizens' Military Training Camps are popular institutions, and there has been a wide-spread public demand for their rapid development; but in view of the financial situation, and the necessity for economy, the War Department estimates for both have been based on the principle of minimum expenditure consistent with the minimum requirements of healthy growth. The House appropriation bill has seriously reduced the Budget allowances for both of these important activities.

While the principal argument for popular military training rests upon the requirements of national defense, I am greatly impressed by the evidence that has been submitted to you as to the physical, moral, and educational value of military training. The testimony of the governors of the several States, of the presidents of educa-

tional institutions, and of the parents of the young men who have undergone the training, is most impressive. I feel satisfied that these collateral nonmilitary benefits alone are more than sufficient to justify the cost of the training. I have always believed that suitable military training is of material advantage to the citizen; that it gives him a physical and mental poise which he does not obtain elsewhere; that it makes him a better employer and a better employee; and that we can not, as a Government, do more for the young men of the country in preparing them for citizenship than in furnishing them with the comparatively simple training which will come from their connection with the National Reserves. As a business man about to take an employee, I would not hesitate, other conditions being equal, to give preference to the man who had received military instruction and training. I think that is the conclusion reached by every employer who has given attention to that phase of the employee's qualifications.

Most people do not comprehend the multiplicity of requirements for our regular forces. They are required to furnish the garrisons for our foreign possessions, to man our coast defenses at home, to furnish protection upon our southern border, and to be available as mobile detachments prepared for sudden emergency throughout the country. The personnel of the Regular Establishment must furnish the administrative and supply overhead for the whole Army of the United States, including the National Guard and the reserves as well as the Regular Army itself. It must also be prepared to carry out its important mission in connection with the development and training of the citizen components of the Army of the United States.

Furthermore, the Army has never been given such exacting and intensive training as it is now receiving. This applies to both officers and men. The Army schools developed during the recent past are of the utmost importance in the development of a highly trained and accomplished body of officers. This is of special importance in the development of our new military policy, as it is essential that the regular officer, in fact as well as in theory, should be a qualified and expert instructor of the great body of citizen soldiers. Our Regular Army service schools are thus the "normal" schools for the Army of the United States as a whole. A limited number of National Guard and reserve officers will be able to enjoy the benefit of actual attendance, but the great body of our citizen soldiers must receive the latest developments in military science and art from selected regular officers trained as instructors at the service schools. It is an interesting fact that although our Army school system was only partially developed before the war, its graduates furnished a very large proportion of those officers who were most conspicuously successful in the days of actual war. If it were possible for every citizen to see what is accomplished at Benning, Sill, Bragg, Riley, Leavenworth, Humphrey, and many other places, including the Army War College in Washington, they would be satisfied that it would be suicidal to retard the development of these institutions.

Moreover, we have requirements not existing to any degree before the war. While the abolishment of chemical warfare may be accomplished by the voluntary action of all nations other than those

that took part in the recent conference, the use of chemical establishments and the ease with which they can be transformed into the production of destructive gases is so well known that I think it would be fatal for us to give up the series of experiments and investigations which were conducted during the war and have been carried on since.

There can be no question about the future of aviation. It was a very important activity during the World War. Its importance will increase. While there may be a difference of opinion as to its future, I do not hesitate to predict that in any future war its importance will be greatly increased. We must have a suitable force of trained aviators, and I think it should be larger even than is now proposed. It would be fatal to fail in the development of an engineering talent in connection with aviation which will keep us well abreast of other countries. This is necessary not only for military purposes but to develop and thoroughly stabilize aviation for commercial needs. We may well look forward to the time when aviation will easily perform many functions now conducted in other ways. It should be a part of the duty of the Army to set the pace in aviation in such a way that we may furnish examples and experience that will be valuable for commercial purposes.

I can not think of greater folly than attempts to economize by unwise reductions of our forces below the minimum required for the development of the new national defense system sanctioned by the national defense act. The entire structure rests upon the soundest economic foundation. The best talent we have in our country, trained in the service before the war, with the added experience of service during the war, and with the fullest appreciation of our economic requirements, is unanimous in the belief that we should not reduce our Regular forces below 150,000 men.

Senator WADSWORTH. We have had put in testimony thus far the actual strength of the Army to-day, Mr. Secretary. I should like you to comment, if you will, upon the average actual strength from day to day throughout a year, as compared with the authorized strength. For example, assuming that the authorized strength of the Regular Army, exclusive of the Philippine Scouts, were to be 150,000 men for the next fiscal year, what, in your opinion, would the actual strength average throughout the year?

RECRUITING.

Secretary WEEKS. That would depend somewhat on the methods adopted for recruiting. If they were very intensive we could probably keep within about 5 per cent of the authorized strength. I have given directions, however, that the greatest care shall be used in the selection of recruits; that we shall only accept men who have had some mental training, who are physically sound, and who are of an age suitable for service; in other words, that we should try to get into the Army men who have had an education, who have all the physical requirements, and who are self-respecting, normal, well-poised men.

I think we are getting better recruits than the Army has ever had, but the requirements for economy have been such that we have not felt justified in establishing recruiting stations outside of those at the various Army posts. Necessarily, that reduces the

number of recruits we would naturally get. I think recruiting has usually cost from \$75 to \$100 a man at different times. I believe that present recruiting is costing about \$8 a man, and we are getting good men. Conducting the recruiting as we are now doing, my judgment is that the number of men we would actually have would not be far from 10 per cent below the authorized strength; so that, answering your question, I should think the average strength would be somewhere from 5 to 10 per cent below the authorized strength.

Senator WADSWORTH. It is practically impossible, is it not, to maintain actually the authorized strength?

Secretary WEEKS. Oh, absolutely so, because recruiting is going on in a great many places. If you induct men into the service you have to pay them, and if you attempted to keep to the actual authorized strength, you might have an excess of men and no appropriation to pay them. The average strength necessarily must be below the authorized strength at all times.

Senator SPENCER. If you had an authorized practical strength of 142,500, that would be your 150,000, with the 5 per cent deficiency occasioned by the recruiting situation which you have outlined. How many of those 142,500 would normally, day by day, be available for duty? What is the per cent of sickness of themselves or their families that keeps them away from active duty?

Secretary WEEKS. I should want to have the Surgeon General answer that question. I have not the figures in my mind; but at every post and every camp there is always a very considerable number of men who are not available for military duty. Men are on detached duty, or they are away temporarily on account of personal reasons. I could not tell, because I have not it in mind, just what proportion of the entire force that would be, but I think we could get those figures very definitely from the Surgeon General or from the staff.

Senator SPENCER. We have had some information to the effect that that would be about 10 per cent.

Secretary WEEKS. I should not think that would be very far wrong.

Senator SPENCER. How would that strike you, General Pershing? Would 10 per cent be substantially a fair estimate as to the number of men not available for actual duty because of sickness or furlough or necessary absence?

General PERSHING. I should think that would be a very good estimate.

Senator HARRIS. Mr. Secretary, if Congress should reduce the Army, would it not be better, then, in view of what you say, for the law to read that it shall average not exceeding a certain number of men? That would enable you to run above the number as it is now part of a year, and give you about 10,000 more, by saying that it shall average not exceeding a certain number.

Secretary WEEKS. We can depend on discharges, on the basis of the present size of the Army, to the number of about 5,000 a month, probably; and, of course, if we had an amount of money sufficient to pay 145,000 men, for example, all of the time, and had the authority of law to enlist more than that number, we might at times take advantage of the opportunity to get some very good men into the service. I do not know that that has ever been tried, Senator, and I

should want to consult the officers of the department before I made a final answer; but I can see that that would have some advantage.

Senator HARRIS. I asked the same question of some of the officers who were here, and I think the information they gave us was that there are probably 10,000 less in the Army than are authorized. If the law authorized an average of so many, or made a lump-sum appropriation of a certain amount, and did not state the number, it seems to me that would give you about 10,000 more than under the present law.

Secretary WEEKS. You mean the possibilities of recruiting up to 10,000 more at some time?

Senator HARRIS. Yes.

Secretary WEEKS. But we would have to stop recruiting, perhaps, at some period of the year, if that were done, or else we would have constantly more than the appropriations provided for.

Senator WADSWORTH. The Senator's question, I have no doubt, arises from the provision on page 18, which states that the Secretary of War is directed to grant discharges until the Army has been reduced to 115,000 men. If that were done, as we were discussing it the other day, and I think Senator Harris will recollect it, you would instantly have to turn around and recruit a lot of those men back into the service.

Secretary WEEKS. That is exactly what we have been doing during the past year. That provision, I say with all respect, was very ill advised. We had to reduce the Army to 150,000, and then we had to go to the expense of recruiting, and in all probability we did not replace as well-trained men as we had been obliged to discharge.

Senator HARRIS. Taking the House bill the way it is, to illustrate what I am trying to show, under the law as it is in the House bill you could not enlist more than 115,000, and as a matter of fact you would probably have only 105,000. The change I suggest, I thought, would enable you to keep 115,000, or whatever the number is, all the time.

Secretary WEEKS. That was an average?

Senator HARRIS. Yes; an average.

Secretary WEEKS. If the appropriation provided it, I think that might be done.

Senator HARRIS. I thought that would give you about 10,000 more, if the Army should be reduced.

Secretary WEEKS. You have to figure by percentages rather than actual number. I think we have now about 139,000 men. Does anyone know exactly?

General PERSHING. I think about 140,000.

Senator WADSWORTH. That includes the Philippine Scouts?

Secretary WEEKS. Yes.

Senator SPENCER. Mr. Secretary, following the question which I asked a moment ago, if the authorized strength of the Army, exclusive of the Philippine Scouts, were made 150,000, there would be approximately 5 per cent deficiency at once on account of the recruiting?

Secretary WEEKS. We would seldom be above \$140,000 actual men. I think we would never be above it if we continued our present method of recruiting, which is most economical.

Senator SPENCER. Very well. Now then, if you were to subtract from the 140,000 the 10 per cent of that number that would be absent

because of sickness or furlough or detail, and not available for active duty, your total Army would then be reduced to 126,000?

Secretary WEEKS. Yes.

GARRISONS AT HAWAII, PANAMA, AND ELSEWHERE.

Senator SPENCER. Of that 126,000, how many are necessary in garrisons at Hawaii, or at Panama, or elsewhere outside of the United States?

Secretary WEEKS. There is a difference of opinion regarding the number of men who should be at those garrisons. This is the condition: As you know, we are bringing the troops home from Europe. There are about 3,000 over there now, or perhaps a few more. Two transports will go over in May, and by the 1st of July, unless present plans are changed, all of those troops will be home, except possibly a very small clearing-up force. I do not think the garrisons at Panama and the Hawaiian Islands should be reduced at all.

Senator SPENCER. What is their present strength?

Secretary WEEKS. The enlisted strength in Hawaii is 10,989; in Panama, 9,702.

Senator SPENCER. We have some troops in China, a couple of battalions; have we not?

Secretary WEEKS. We have two battalions in China.

Senator SPENCER. Those are how many?

Secretary WEEKS. Five hundred and seventy-three.

Senator SPENCER. Are there any others?

Secretary WEEKS. Yes. We have 588 men in Alaska.

Senator SPENCER. Are there any others?

Secretary WEEKS. Yes. We have 1,399 in Porto Rico.

Senator SPENCER. How many have we in the Philippines, outside of the Philippine Scouts?

Secretary WEEKS. We have the difference between 14,002 and 6,956 Philippine Scouts.

Senator SPENCER. Seven thousand and forty-six.

Secretary WEEKS. And we had, at the time these figures were made up, which was very recently, 5,184 men in Germany.

Senator SPENCER. Those will be back?

Secretary WEEKS. Those will be back.

Senator SPENCER. Is that the total of extraterritorial forces—forces outside the United States?

Secretary WEEKS. Yes.

Senator SPENCER. As I add those up, it makes a total of 29,353, which would mean that there would be less than 100,000 available for duty in the entire United States.

Secretary WEEKS. Ninety-nine thousand six hundred and seventy-five are the figures that that would leave as the enlistment here when these figures were made up.

Senator SPENCER. What number of those figures did you allow for sickness or furlough?

Secretary WEEKS. That is all there are. That is the entire force.

Senator SPENCER. That does not allow anything for those things?

Secretary WEEKS. No.

Senator SPENCER. Then the number available for duty would be substantially less than that?

Secretary WEEKS. Yes.

Senator SPENCER. If the 10 per cent basis were taken, it would bring it down to about 90,000 available men in the entire United States?

Secretary WEEKS. Yes. Now, Mr. Chairman, I do not know whether these figures have been submitted to you or not, but when people think of the Army they usually think of Infantry, Cavalry, and Artillery. They do not think of the number of men who are employed in other branches of the service, and necessarily so, too. I could give the figures of the number of men in each branch of the service, which would point that out very clearly, unless they have been included in the record.

ASSIGNMENT OF ENLISTED MEN.

Senator WADSWORTH. I think they have not. We have had the assignment of all the officers presented to us in the different branches and detailed services, but not of the enlisted men by branches.

Secretary WEEKS. Would you like to have me insert them in the record?

Senator WADSWORTH. Yes; I think it would be very well.

Secretary WEEKS. They are as follows:

Infantry	52,365	Corps of Engineers	4,873
Coast Artillery	15,507	Ordnance Department	2,866
Field Artillery	15,145	Signal Corps	2,968
Quartermaster Corps	12,163	Chemical Warfare Service	545
Cavalry	10,903	Finance Department	516
Air Service	9,479	Detailed enlisted men's list	5,836
Medical Department	8,483		

Senator SPENCER. What does that mean?

Secretary WEEKS. That means men who are detailed with the Organized Reserves, and the Guard, and for various other purposes.

Senator SPENCER. And the total of that is how many?

Secretary WEEKS. Five thousand eight hundred and thirty-six.

Senator WADSWORTH. The R. O. T. C. takes quite a number of them?

Secretary WEEKS. Yes. Those figures indicate the very considerable number of men who are in branches of the service which are not known as fighting forces.

Senator SPENCER. And those are on the basis of a total enlisted strength of 150,000?

Secretary WEEKS. Those are on the basis of the present strength of the Army. Those are the actual figures.

Senator WADSWORTH. What is the date of that table, Mr. Secretary?

Secretary WEEKS. As of March 31.

Senator HARRIS. And what is the total of it?

Secretary WEEKS. One hundred and forty-one thousand five hundred and ninety-nine. That includes the Philippine Scouts.

Senator WADSWORTH. The Philippine Scouts are almost entirely Infantry, are they not?

Secretary WEEKS. There is one regiment of Artillery, and the rest are Infantry.

Senator WADSWORTH. Mr. Secretary, have you had to do much shifting around this year?

Secretary WEEKS. Yes; it has been necessary to do a good deal. Of course, we had a very limited fund for transportation purposes, and, as far as possible, we have sent men across country and saved transportation.

Senator WADSWORTH. You mean you have marched them?

Secretary WEEKS. We have marched them.

ABANDONMENT OF CAMP DIX AND CAMP LEWIS.

Senator WADSWORTH. We have had some testimony, prior to your appearance, to the effect that you were giving up or contemplating giving up Camp Dix, which is one of the large war-time cantonments, and Camp Lewis.

Secretary WEEKS. It was the original purpose of the organization that we should continue a division at Camp Lewis, Camp Dix, and Camp Travis. Naturally, we could get better results from the divisional men by having them in one post than we could in any other way—I mean, as to their training, etc.—but those camps are now 5 years old. They are commencing to go to pieces rather rapidly. The necessity for repairs, for more or less reconstruction of waterworks, and every other facility that a camp must have, not only has made a serious inroad on our expenditures for such purposes but it will be an ever-increasing amount. I do not think anyone in the Army wishes to take the troops away from those camps for any other reason than because it is not economical in dollars and cents to keep them there; and plans are now being studied to transfer at least a considerable portion of the men at those camps to permanent forts, where the buildings are substantial, and repairs are not any considerable item of expenditures.

Senator WADSWORTH. Have you quarters sufficient to take care of the troops that you are moving?

Secretary WEEKS. That study has not been completed, and I have not had an opportunity to go over it. When it is completed I intend to go over the whole question of the distribution of troops.

Senator HARRIS. Mr. Secretary, would it not be better and more economical if you could enlarge posts, sell the old smaller ones, and concentrate the troops? Would there not be less travel and less overhead?

Secretary WEEKS. There are 240 places in the United States where there are troops or caretakers. If we could commence to-day to arrange for an Army of 150,000 men, of course the number of such places would be tremendously reduced. I do not believe there can be any very great reduction in posts unless authority is given to the department to abandon such posts as it does not think are necessary for military purposes.

Senator HARRIS. You have not that authority now?

Secretary WEEKS. No; I have not. I can not sell real estate, even, without the authority of Congress. I can withdraw troops from a post and leave caretakers, but I can not abandon the post or dispose of it. If you do withdraw the troops and leave caretakers, it involves some expense. I have recently given orders to abandon, and I presume it has been done, Fort Apache, in Arizona. It was established during the Indian wars. It is 80 miles from any transportation. It

is the most expensive place we have in the whole Army list of forts to provide with supplies and to transport men to and from, and there does not seem to be any justification for continuing it; but I can not dispose of Fort Apache without the authority of Congress.

Senator SPENCER. Mr. Secretary, referring to this active force of 99,000 which you estimate as being now available in the United States, and which I roughly have figured, on the basis of 150,000, as being 96,647, can you tell us what proportion of that number would ordinarily be used in administrative work, in office work, and thus away from the line?

Secretary WEEKS. I can not do that in my head, Senator.

Senator SPENCER. Is there any percentage?

Secretary WEEKS. Oh, yes; those figures can be furnished you. I can give you the figures pretty accurately. I think it would perhaps be better to give them based on the present number of men in the Army.

Senator SPENCER. That would be substantially the same for an army of 150,000; would it not?

Secretary WEEKS. Yes; substantially the same.

PRESENT STRENGTH OF THE ARMY.

Senator SPENCER. Because the present strength of the Army is what, did you say?

Secretary WEEKS. One hundred and forty-one thousand.

The figures are as follows:

General overhead.....	14,700
Schools.....	5,800
Training reserves.....	7,880
Coast defenses.....	6,000
Overseas garrisons.....	34,500

I am accounting for all of the forces now.

Mobile troops in the United States, 70,520.

That is based on a total of 141,000.

Senator SPENCER. That number of 70,520 would include the Medical Corps, probably, and the Quartermaster Corps, but would not include, probably, the Finance Corps?

General PERSHING. It would include everything on duty with mobile troops. Of course, they have their due proportion of all those troops.

Secretary WEEKS. That number of 70,520 included, at the time these figures were made up, 8,000 troops in Germany. The actual number was 62,520.

Senator WADSWORTH. The 14,000 which you stated to be the general overhead, of course, would include a considerable number of Medical Department troops and Quartermaster troops and Ordnance troops?

Secretary WEEKS. Undoubtedly. I think those figures can be given you accurately if you wish them.

Senator WADSWORTH. Whereas the 70,000 mobile troops would likewise include certain Quartermaster troops that accompany mobile troops, and certain Medical Corps units that accompany mobile troops, and certain Ordnance detachments, I assume?

Secretary WEEKS. I should say that force of fourteen thousand and odd men would include those men in the noncombatant forces who were not actually serving with troops, who were serving in Washington or serving at general hospitals and similar places.

Senator WADSWORTH. And at headquarters?

Secretary WEEKS. And at headquarters, but not actually serving with troops.

Senator WADSWORTH. You are now speaking of the overhead?

Secretary WEEKS. Yes; the overhead.

AUDITING OF WAR CONTRACTS.

Senator WADSWORTH. Mr. Secretary, there is one other point I want to ask you about, although it has nothing to do with the size of the Army, and if other Senators want to ask questions concerning the size of the Army or the Guard or the Organized Reserves I will defer it; but a rather interesting point was brought up when we were hearing testimony from the officers of the Finance Department concerning the contract audit work which is being done by that department.

I think, as the result of certain observations made while that testimony was being given, you addressed a letter to the chairman of the committee suggesting the increase of the appropriation by \$500,000, the idea being that if the Finance Department were given a comparatively generous sum this year and next year it could make rapid progress in cleaning up that audit work and recover considerable sums into the Treasury, whereas if the appropriations were small, and the work dragged along for 6, 7, 10, or 15 years, it could not be done effectively, and in the long run the Government would fail to get into the Treasury a lot of money that it might get in if the work were done promptly in the next two or three years.

Secretary WEEKS. Every day of delay in auditing those contracts adds somewhat to the difficulty not only of auditing but of getting the money found due the Government. The work has been carried on since shortly after the armistice and there has been a very limited amount of money available for that purpose. The auditing done by the Finance Bureau has been done out of their general funds. Incidentally the recommendation this year for that bureau was about \$1,267,000, which was cut in the House below \$1,000,000. That will practically prevent the bureau doing any auditing if it does the other work incident to that bureau. We have done some auditing out of surplus funds that we have had in the Air Service. Some of the Air Service contracts have been audited in that way; but there is every reason for haste in doing this auditing, and there will be returned to the Treasury a very considerable amount of money if the 150,000 contracts made by the War Department during the war can be audited within the next three or four or five years.

I can not sufficiently strongly urge that that amount, \$500,000, be provided this year to continue the auditing work. There are very few cases where some discrepancy is not found. Sometimes it is very small; occasionally there is a case where there is more due the contractor; but in most cases there is something due the Government. I suppose you have had detailed testimony on that subject from General Lord.

Senator WADSWORTH. Yes.

Secretary WEEKS. So that you are familiar with that; but there is and always will be, necessarily, more or less criticism of the contracts that were made, and the way they have been handled, and the sale of property. It is inevitable that you can not have that work completed without errors and some delays—perhaps unnecessary delays—furnishing a basis for criticism. The quicker we get it out of the way the better for the Department and the better for the Government; and I should feel that it would be a serious mistake not to make that provision.

Senator WADSWORTH. As a matter of fact, we have in sight several millions of possible recoveries, have we not—over twenty millions?

Secretary WEEKS. Thirty millions.

General LORD. About thirty-five millions since the institution of the contract audit, and then there are some seventeen millions in sight in the Air Service contracts, the limited number of them that will be audited by the end of this year.

Secretary WEEKS. And the Air Service auditing is done by means of saving that we are making in other ways connected with the Air Service. No appropriation has been made for that auditing.

ECONOMY.

Senator WADSWORTH. Mr. Secretary, will you tell the committee in your own way what efforts you have made in the direction of economy since you took office—what measures you have instituted for the saving of expenditures?

Secretary WEEKS. I should like to answer that question very deliberately, Mr. Chairman. I should probably overlook many things that have been done if I attempted to answer the question without giving it some thought and some preparation. If you will permit me to answer it by sending to the committee the answer within 24 hours I shall be glad to do it.

Senator WADSWORTH. We shall be very glad to have it. I happen to have heard of some of those efforts, but I know I have heard of very few of them, comparatively, and I should like to get the story of the efforts of the department to save money.

Secretary WEEKS. We have been trying to economize in every direction, and I think the responsible officers in the department have cooperated as far as they have been able in eliminating the little things and the big things that conspire to make extravagance in any governmental operation.

Senator WADSWORTH. Senator Spencer, do you care to ask Secretary Weeks any more questions?

Senator SPENCER. No.

Senator WADSWORTH. Senator Harris?

Senator HARRIS. No.

Senator WADSWORTH. Have you anything you want to emphasize, Mr. Secretary.

Secretary WEEKS. No. I had expected the committee would ask me questions concerning those things they wished to have elaborated somewhat. The officers who have appeared before the committee were instructed to give the fullest and frankest testimony to the committee, and I have no doubt you have a very complete history

of the appropriation bill and the objects of the department. Therefore I do not care to elaborate on those matters unless the committee wishes it.

PRIVATE SECRETARY TO SECRETARY OF WAR.

There is one small matter I want to call to the attention of the committee. My secretary is paid \$2,500. The position is very important. It is a good deal more important than the positions of most secretaries. He has to use a very considerable judgment in handling papers and people, and his hours are not eight, they are very many more than eight. Frequently in other departments—I have in mind one department where secretaries to Assistant Secretaries receive as much as \$3,500. He is worth more money.

Senator HARRIS. How much would you like to have it increased, Mr. Secretary?

Secretary WEEKS. He certainly should have at least \$3,000 a year, and I think he ought to have \$3,500. If you want to take the trouble to look into the question of comparative salaries of secretaries, you will find that even in places of lesser importance than his they are receiving from \$500 to \$1,000 more.

Senator WADSWORTH. Does the Budget estimate carry \$3,000 for him?

General LORD. It does. It carries \$3,000. It was the only increase in salaries made in the Budget. I see.

Senator WADSWORTH. If that is all you have to emphasize, Mr. Secretary, we have no more to ask you.

SECRETARY WEEKS.

In compliance with your oral request, I am submitting herewith this somewhat hastily prepared memorandum covering certain economies introduced by me in the administration of the Army and the operation of the War Department which have resulted in actual savings. It is very apparent, however, that many economies which have been instituted have resulted in savings which can not be crystallized into actual amounts—policies which are permanent in their character and the result of which will continue to be reflected in reducing the expenditure for the operation of the Army. Many economical measures are not matters of exact record and can not be included in this memorandum:

Secretary's office, proper-----	\$50,000.00
(This saving is made by the elimination of certain annual reports, discontinuance of rented storage, and a rearrangement of records that made a marked saving in the requirements for filing equipment, and elimination of telephones.)	
Military intelligence division, General Staff Corps-----	2,500.00
(This saving is effected by the reorganization of the clerical force of the division.)	
Army War College-----	7,500.00
(Effected by reduction of personnel and reorganization of office.)	
Adjutant General's office-----	157,000.00
(Effected by reduction and curtailment in certain activities.)	
Inspector General's office-----	489.12
(Effected by declining to fill a vacancy that occurred in the statutory requirements of the office.)	

Office of Chief of Finance-----	\$43,283.71
(Effected by standardization of salaries and demotion of employees receiving salaries in excess of standard grades, by discharge of high-salaried employees, reduction of forces, introduction of improved methods, elimination or suspension of work not immediately required, savings in stationery and printing and binding, restriction of telegraph and cable service, reduction in postal charges, recovery of property, and coordination of work in connection with the National Guard.)	
Quartermaster Corps-----	19,000,000.00
(Effected by reduction of labor and clerical forces, elimination of various activities, curtailment of issuance of supplies, reduction in manufacturing establishments and economies introduced in manufacturing establishments, maintenance of motor transportation, operation of Government-owned tank cars, economies in operation of water transport, cancellation of leases, reduction in forage ration, discontinuance of certain fixed allowances, and introduction of a new system in connection with the clothing allowances for soldiers.)	
Signal Corps-----	45,000.00
(Effected by economies instituted in the telephone service.)	
Air Service-----	3,400,000.00
(Effected by introduction of new methods governing the apportionment of funds and purchase of supplies, gasoline and oil, reduction in amount of work upon various projects, a more economical policy of purchase in connection with the procurement of types of aircraft, reduction in civilian personnel in the office of the Chief of Air Service, remodeling of airplanes which otherwise would be obsolete, the restriction and closing of certain activities, decrease in civilian personnel in the field and by the concentration of equipment and supplies.)	
Medical Department-----	110,000.00
(Effected by adoption of general methods of economy, such as saving on current medical literature, a new method of handling supplies for the laboratories, and the standardization of hospital libraries.)	
Bureau of Insular Affairs-----	2,728.54
(Effected by reduction in personnel.)	
Chief of Engineers-----	18,100.00
(Effected by reduction in civilian employees in the office of the Chief of Engineers, economies in printing of annual report by condensation of material and elimination of detail, and the use of office supplies transferred from surplus stocks.)	
Ordnance Department-----	534,100.00
(Effected by reduction in expenditures reported as savings to the Director of the Bureau of the Budget and the limitation of repairs at permanent stations except as needed to protect storage, adjustments in organization, consolidation in activities, and similar administrative measures.)	
Chemical Warfare Service-----	354,000.00
(Effected by consolidation of activities resulting in saving of rentals and overhead.)	
Chief of Infantry-----	15,000.00
(Effected by reduction in personnel at Tank School and savings in cost for storage batteries.)	
Chief of Cavalry-----	1,700.00
(Effected by discharge of civilian employees and reduction and closer supervision of the mailing list.)	
Chief of Field Artillery-----	2,900.00
(Effected by elimination of employees.)	
Chief of Coast Artillery-----	798.50
(Effective by reduction in personnel in the office of the Chief of Coast Artillery.)	
Militia Bureau-----	380,000.00
(Effected by scaling down of the National Guard equipment and more careful study of proposals for rifle ranges.)	

Inland and Coastwise Waterways Service.....	\$848,240.00
(Effectuated by consolidation of overhead personnel, readjustment of wage scale, elimination of projects not absolutely necessary, and application of a new procedure in connection with the construction of terminals.)	
General administration.....	7,000,000.00
(Effectuated by confining recruiting activities to established posts and discontinuing all intensive recruiting, which resulted in a material decrease in the enlisted personnel of the Army and in savings under Pay of the Army, Subsistence, Clothing, Equipment, and Army Transportation to the amount given. In addition to this the savings resulting from the restriction of recruiting campaign appear also in the totals given under the Quartermaster Corps savings.)	
Replacing appropriations.....	800,000.00
(By a strict oversight of expenditures from these appropriations and the disapproval of projects except when absolutely needed for the efficient operation of the Army this amount has been saved.)	
Mileage.....	500,000.00
(This saving has been effectuated by a very careful scrutiny of all mileage orders, resulting in a discontinuance of all travel that was not absolutely necessary.)	
General reserve.....	5,000,000.00
(Under the system established in the War Department an amount is set aside at the beginning of the year under the title of "General reserve" showing certain funds which are kept absolutely under the control of the Secretary of War, which are not available for obligation without his specific approval. There is now a fair prospect of saving the entire amount, something more than \$5,000,000, involving amounts from various appropriations.)	
Panama Canal ¹	1,750,000.00
(Effectuated by reorganization and reduction in personnel.)	
Grand total.....	40,023,339.96

There are not included herewith any amounts accruing to the Government from the operation of the contract audit, nor savings resulting from the transfer of surplus supplies, and various other savings resulting from economical policies instituted throughout the entire activities of the Army. There has been all through the year constant pressure upon the bureaus, territorial departments, reaching down to the posts and stations—a pressure that has resulted in the saving of many thousands of dollars that are not of record and can not be reported in a memorandum of this sort.

The Secretary of War throughout the year has had the hearty co-operation of all his assistants, the General Staff, the chiefs of branches and bureaus, and the personnel of the entire Army in effecting savings, and in many instances these savings have been made at a sacrifice of conveniences and comforts to the Army personnel.

A very complete study of economies has been made and submitted to the Director of the Bureau of the Budget which covers these activities in greater detail and includes savings and postponements of expenditure which are impossible to include in this memorandum.

¹ Panama Canal employees reduced this fiscal year from 17,000 to 11,000, approximately.

STATEMENT OF GEN. JOHN J. PERSHING, CHIEF OF STAFF.**GENERAL STATEMENT.**

Senator WADSWORTH. General Pershing, we will be glad to hear from you on any aspect of this problem in any way you choose to present it.

General PERSHING. Mr. Chairman, I have prepared a brief general statement here, which I would ask the indulgence of the committee that I be permitted to read.

Senator WADSWORTH. Certainly.

General PERSHING (reading):

The Military Establishment of the United States should be in keeping with our position among the nations and our responsibility in the world, not that we should maintain a large permanent military force but that we should adopt and maintain a system which will permit of expansion in time of need to the full extent of our resources in men and matériel. We should possess and continue from year to year a consistent and well-matured plan contemplating definite preliminary preparation and training for its complete development in case of emergency.

This is only the part of common sense and ordinary precaution. World conditions to-day are not reassuring, but regardless of all that we can not afford ever again to be negligent. Human nature has not changed and the history of nations is one of strife. Our own experience should have taught us that the existence of envy, jealousy, and hatred can no more be ignored among nations than among individuals. The friends of to-day are often the enemies of tomorrow. Failure to recognize these facts has without exception found us always unprepared. Lack of preparation in all our wars has caused us unnecessary loss of life and left us staggering under financial burdens.

There is no doubt but that the Civil War might have been prevented had the country been equipped with an Army of reasonable size ready for immediate use. A measure of preparedness, such as that contemplated under the law of 1920, with a substantial merchant marine, would probably have kept us out of the World War. At least it would have saved us the humiliation of depending upon the Allies to hold back the enemy for more than a year before we were even partially prepared. As a matter of fact, with adequate military preparation, there can be little question that the United States under strong leadership could have prevented the World War altogether.

The size of the Army in peace times should be determined by a full consideration of its purpose and mission. That mission is to provide an adequate force for minor emergencies, to maintain law and order at home, to safeguard our insular possessions, and to prepare our citizen soldiery for the defense of the country in time of war. The Regular Establishment must provide adequately for overhead administration, for schools, for the education of our officers, and for sufficient officer personnel as instructors for the citizen forces. In order to preserve the units, the technique and the experience of the World War, the Regular Army should be a well-balanced force, consisting of all arms and special corps. It should be a model for the great expansion that must follow the declaration of war. We can not maintain these special corps in large numbers during peace because of prohibitive expense, but we should maintain the nucleus of each, both for training and for ready expansion.

These considerations were no doubt in the mind of Congress when it analyzed our military situation in 1920 and determined upon the definite policy embodied in the National Defense Act of 1920. This act expresses the views of military men throughout the country, including the great mass of citizen soldiers who fought in the World War. It is in entire accord with the spirit of our institutions and has met with the approval of all who have given it study and consideration. It perpetuates the historic organizations of American arms that saved Europe, and utilizes their traditions and personnel as the foundation upon which to build future organizations of similar character. It provides for their orderly mobilization and training in their respective localities in time of war, and avoids the confusion and expense incident to the hasty assembly of untrained and unrelated personnel at extemporized and widely scattered camps.

The law of 1920 was framed with the idea of using the Regular Army as a first line of defense, but this is not possible with its present strength. Therefore the National Guard must be included in that category, because the Regular Army at 150,000 men and 13,000 officers is barely of sufficient strength to meet even minor emergencies, to garrison our overseas possessions, and to provide a minimum of instruction for the citizen forces. For all these purposes the commissioned personnel must be highly trained from a professional standpoint. The greater the number of such officers the more quickly can our Armies be made ready and the more efficient will our forces be. The mission of the Regular Army to train the National Guard and the reserves necessarily increases in importance as its own numbers decrease, and, therefore, if its strength in officers and men is reduced beyond a certain point it must abandon the principal mission allotted to it and the structure falls.

The details of requirements have been presented to your committee by various officers in an honest endeavor to show the necessity for approval of the very moderate estimates of the department for officers, men, and funds. This program is of no greater interest to the individual officer or man of the Army than it is to every Member of Congress or to every voter in the land. It is the Nation's Army, and we are but public servants. We come before you not as special pleaders nor as applicants for favors. We have merely attempted to point out, as professional men, the means by which a reasonable measure of security for the present and preparation for the future may be carried out. The system already adopted, upon which our discussions are based, is sound; it is economical; and if followed up will provide the country against the dreadful consequence that have always followed and that must inevitably follow a failure to take reasonable precautions against the day of war.

I would like to start out, Mr. Chairman, by going into a little more detail following the Secretary's testimony, if I may.

I will just go over those figures again, if I may. With an Army of the size of 150,000 we have 14,700 for overhead, 5,800 for schools—this is clearing up the questions asked by Senator Spencer.

Senator SPENCER. Is this on the present strength of the Army?

General PERSHING. This is based on 150,000.

Training reserves, 9,550; coast defenses, 7,750; overseas garrisons, 34,500. That, of course, is a reduced figure. The Army and Navy Joint Board, after considering that question of overseas garrisons, made a recommendation for those garrisons which summed up 47,000; but, of course, in view of the situation in the Philippine Islands those figures have been slightly modified, as have the sizes of the other garrisons, in view of the economical demands of the situation, so that we ask 10,000 for Panama, 15,000 for Hawaii, and 9,500, including Philippine Scouts, for the Philippine Islands.

Senator WADSWORTH. Including the Philippine Scouts?

General PERSHING. Yes; including the Philippine Scouts.

Senator SPENCER. That only means about 3,000 or 3,500?

General PERSHING. Yes. I am including Philippine Scouts in that.

Senator WADSWORTH. Then, you are contemplating reducing the number of white troops in the Philippines?

General PERSHING. Yes.

Senator WADSWORTH. From something like 6,000 or 7,000 down to 3,000?

General PERSHING. Something like 3,000.

Senator WADSWORTH. Taking 3,000 away?

General PERSHING. No; down to about 3,000.

Senator SPENCER. What about Porto Rico?

General PERSHING. Well, Porto Rico I did not put in. That ought to go in there—1,000.

Senator WADSWORTH. There are 1,300 in Porto Rico, are there not?

General PERSHING. The actual strength in Porto Rico now is 1,399.

Senator WADSWORTH. Just one other question. When you say the Philippines, do you include the troops in China?

General PERSHING. Yes; that is including the troops in China.

Senator SPENCER. Would you want to include those in Alaska and China?

General PERSHING. Yes; China is included in the Philippines garrison, and Alaska is included in the home garrison.

If you analyze that figure of 78,000, which is the approximate number that we reach (and these figures must be approximate because they change from time to time and change with different officers who estimate them), you will have about 39,000 Infantry, a little over 9,000 Cavalry, and 13,000 Field Artillery. Then you will have Air Service of about 4,500, Engineers something like 4,000, and Signal Corps just a little less than 700. Those are the troops that would be available for service internally.

Senator WADSWORTH. In the United States?

General PERSHING. In the United States.

Senator WADSWORTH. Mobile troops?

General PERSHING. Mobile troops. That is the maximum that would be available for immediate service overseas; I mean in any emergency that called for an expeditionary force. And to continue that just a little bit further, the troops that are necessary here at home for emergency purposes are usually Infantry. That leaves you less than 40,000 Infantry within the limits of the United States to handle any situation that might arise.

I do not see how it is possible for us to go a single bit lower than that. You scatter 40,000 troops over the immense area of the United States, as we must to accommodate them in the posts that are available, and they are not only difficult to get at, but when you get at them you have not very much to fall back on. I would like to emphasize that particular point before the committee.

Senator WADSWORTH. I suppose you emphasize the fact we must rely almost entirely on Infantry because the great body of our Cavalry is tied down to the Mexican border?

General PERSHING. Yes; and its presence is considered necessary there. And, moreover, it would be very difficult to transport them even if you should be called upon to do so.

I would like to take up, if I may, the question of those officers—I do not think it is necessary for me to go into discussion of our foreign possessions. It seems to me that situation is so clear and so plain that I do not believe it is necessary to emphasize the necessity for maintaining the force that we ask at Honolulu or at Panama. Those two outposts are so very important and their importance seems to me to be so apparent that I do not believe I shall waste the committee's time by going into any further details on that subject.

NUMBER OF OFFICERS.

Now, as to the number of officers. This bill expressing the War Department's idea as to the number of officers and their allotment to grades and their organization is one that we consider of very great importance. You will remember the present organization allotment

to grades is based upon the strength of 17,000 about, as provided for in the act of 1920. The reductions that have taken place from the size of the Army as provided in that law brought us down to 150,000, and while the War Department would have been quite within its authority (as no limit was placed on officers) to have gone on and increased the officer personnel up to the limit of 17,000, it has not seen fit to do so, and we find ourselves to-day with only about 13,000.

Of course, promotions take place in accordance with the law as the Secretary construed it, and which is in accordance with precedents throughout the history of the Government, but last year he did not undertake to fill up the Army with second lieutenants, and so we have a great many vacancies in the grade of second lieutenants; or rather, we have no officers in the grade of second lieutenant, and a great many vacancies in the grade of first lieutenant.

We propose to get along with 13,000 officers organized on a basis of 14,000, with the idea that we do need 14,000, and with the possibility of at some time reaching that number, and also with the idea in view of not eliminating so many officers as we would be required to eliminate if we came down promptly to a basis of 13,000, and whether we would ever need the extra 1,000 or not is more or less problematical anyway. It is my belief that we shall be able to use reserve officers for that purpose, and that the use of such reserve officers would be advantageous to the officer, who has an opportunity to come in and assist in the training for the summer, and would be advantageous to the Government because we would be training a lot of reserve officers from time to time who would be able to take their positions or higher positions during a war.

Senator WADSWORTH. And it would be a measure of economy also, would it not?

General PERSHING. And it would be a great measure of economy. So I do not believe we would ever come to Congress and ask for this other thousand. But if we undertook to reduce to 13,000 immediately we would have to eliminate so many that we would get beyond the point of eliminating the least efficient, perhaps, and would have to drop out a great many of the efficient officers.

The question has been raised as to whether we could get along with a less number of officers should the Congress see fit to reduce the size of the enlisted force. I do not think that we should reduce the number of officers, because we are short about 20 per cent in the allotment of officers to active troops, and we are also short in our requirements for officers engaged in training the National Guard and reserves, so that whatever small saving we might make due to a reduction in the number of active organizations or, in other words, the enlisted strength of the Army, would be needed anyway in other fields, so that there is no chance, to my notion, of reducing the number of officers due to a reduction in the enlisted force. We will need the officers, anyway.

Senator SUTHERLAND. Do you not have more demands now for officers to go to schools than formerly?

General PERSHING. Oh, yes; and the demands for other purposes are increasing right along—the demands for officers in the reserve and National Guard. As those two elements of the National Army grow we will need more and more officers.

Senator HARRIS. How many officers are detailed for service in the military schools of the various States, General? I believe they call them land-grant colleges.

Senator WADSWORTH. You probably mean the R. O. T. C. That includes the land-grant colleges, and goes far beyond that.

Senator HARRIS. Yes.

General PERSHING. In the Reserve Officers' Training Corps we have 642—that is, at the various schools and colleges—and, of course, the committee is very familiar with the impression that that sort of training has created in the minds of educators throughout the country, and they will all rise up and protest against any reduction anywhere.

Senator SUTHERLAND. Have you supplied all that wanted officers for that purpose?

General PERSHING. So far as I know at the present time, Senator.

Senator WADSWORTH. You have supplied, of course, officers for the units that have been accepted?

General PERSHING. Yes.

Senator WADSWORTH. But is it not a fact that several universities and colleges are petitioning for acceptance?

General PERSHING. Yes; that is so; yes, indeed.

Senator WADSWORTH. In other words, if you have the officer personnel and the appropriation, the R. O. T. C. could be further expanded?

General PERSHING. Yes.

Senator WADSWORTH. And it would be expanded at the request of the universities?

General PERSHING. Yes.

Senator WADSWORTH. And not at the request of the War Department itself?

General PERSHING. No.

Senator WADSWORTH. The demand comes from outside?

General PERSHING. Exactly; yes, sir. With this number of 13,000 officers, hasty calculation shows that in time of mobilization of our armies up to, say, 2,000,000 men, which would include all of the Regular, National Guard, and Reserve divisions, you would have for the officers of such a command about 1 officer in 10 a regular. That would be the proportion, and so the number of trained officers would be relatively very small, even at 13,000 men.

Senator SUTHERLAND. General, how does the number of officers that are now engaged in the school work compare with the number who were so engaged prior to the war, or have you that?

General PERSHING. I have not that, but there has been a very great increase, a very great increase. I could get you that exactly, if you like.

Senator SUTHERLAND. I thought perhaps you had it.

General PERSHING. I haven't it here; no, sir.

Senator WADSWORTH. You may proceed, General.

General PERSHING. I believe I have nothing, unless the committee thinks of something.

Senator WADSWORTH. Have you any comment to make about the reduction in commissioned personnel as provided for in the House bill?

ENLISTED STRENGTH OF REGULAR ARMY.

General PERSHING. The present authorized enlisted strength of the Regular Army is 150,000. In addition, about 7,000 Philippine Scouts are authorized, making a total of 157,000.

The War Department estimates that the minimum enlisted strength that can be authorized and the Military Establishment function efficiently is 150,000, including the 7,000 Scouts, or 143,000 exclusive of the Scouts.

In round numbers, the 150,000 are required for various purposes, as stated below. The present distribution of the 140,000 enlisted men we now have is also shown:

	Required.	Present number.
General overhead.....	14,700	14,700
Schools.....	5,800	5,800
Training reserves.....	9,550	7,880
Coast defenses.....	7,750	6,600
Overseas garrisons.....	34,500	34,500
Mobile troops in United States.....	78,000	170,520
	150,300	140,000

¹ Includes those temporarily absent in Germany; about 8,000.

The Joint Army and Navy Board projects call for about 47,000 troops for the Philippines, Hawaii, and the Canal Zone. To meet the demands for economy the War Department has temporarily reduced this nearly 25 per cent, or to 34,500.

There are now about 34,500 troops used for foreign garrisons, exclusive of those on the Rhine. A redistribution of the 34,500 is contemplated so as to provide for 9,500 in the Philippines (including Philippine Scouts), 15,000 in Hawaii, and 10,000 in the Canal Zone. Should troops remain in China they are to be detached from the 9,500 allotted to the Philippines.

The appropriation bill is silent as to the Philippine garrison, but proposes limits for our two most vulnerable strategic points—Oahu and the Canal Zone. The garrison proposed for Oahu is one-third of the minimum fixed by the War Department, and that of Panama is one-half the War Department's minimum. It is, at least, a debatable point as to whether these garrisons are "rat holes" eating up appropriations or whether they are a real military necessity, which can not be sacrificed without danger to our national defense.

We now have 12,907 officers. There is a shortage with troops and with the reserve forces. A reduction of the enlisted strength will not release enough officers to relieve the shortage with troops.

To meet the demand for economy the War Department has come down to a rock-bottom figure of 13,000 with which it can get along for the time being. These 13,000 would be distributed and used about as follows for the present:

General overhead.....	2,300
Schools.....	2,650
Reserve forces.....	1,550
With troops.....	6,500
Total.....	13,000

As rapidly as possible the overhead will be decreased and diverted to reserve forces.

This bill reduces the number of officers to 11,000. It also distributes these in various grades. Its provisions are for one year only. It leaves us without any continuing law or policy.

The bill puts nearly 2,000 officers out of office. It offers an option to others between going out or being demoted. Should demotion be declined by the officers, the actual reduction will be much greater than 2,000 and a great number of valuable officers, many with war experience, will be lost to the Government service.

This enormous reduction must be accomplished by July 1, 1922, no matter when the bill is enacted. The method of doing this is put up to the President.

Probably the worst feature of the bill is that it fixes a new authorized strength for one year only. It destroys all permanency or continuity of the strength and composition of the officer list. If subjected to an annual violent disturbance through appropriation acts, we can not expect reasonable men to come into the Army. Neither can we expect the best efforts from those now in, many of whom have served through two wars and practically all of whom have served in one.

Under the bill the President may, in such manner as he sees fit, either put out of the Army or demote 210 colonels, 237 lieutenant colonels, 787 majors, 1,575 captains, and 299 first lieutenants of the line. If none of these are willing to accept demotion the effect on the line alone would be to put the above total of 3,108 officers out of the Army, or at least off the active list. In addition to the reduction for the line the bill requires an outright reduction without demotion of 627 officers of the Medical Department and Corps of Chaplains. If no officers should choose to accept demotion the total reduction under this bill would be about 3,700 officers, reducing the active list to a little over 9,000 and putting out of the Army more than one in every four of our present officers.

The bill recommended by the War Department has the advantages:

1. Of being permanent and obviating an annual determination of the strength and composition of the commissioned list.

2. Of providing the minimum numbers needed.

3. Of establishing a reduction in various grades without resorting to demotion and involving only about 850 officers leaving the active list, many of whom will leave through normal causes or of their own volition.

4. It gives time to make the reduction with substantial justice to all officers, no matter where stationed.

5. It avoids crushing the spirit and ruining the efficiency of the officers who remain in by still leaving them a reasonable prospect of some promotion before reaching the retiring age.

6. It does not place a stigma upon the eliminated officers of less than 20 years' service by giving them the same compensation as an inefficient officer placed in Class B.

The following is a hasty tabulation of the effect of the appropriation act:

Promotion list of officers.

	Present authorized number.	Reduced number.	Reduction by July 1, 1922.
Colonels.....	599	389	210
Lieutenant colonels.....	674	437	237
Majors.....	2,245	1,458	787
Captains.....	4,490	2,915	1,575
First lieutenants.....	¹ 3,068	2,769	299
Total.....	11,076	7,968	3,108

¹ Present actual number.

A total of 3,108 line officers out of 11,076 must be either eliminated or offered an opportunity to step down to the next lower grade. If 100 of the colonels should be demoted an additional 100 lieutenant colonels would have to be eliminated or demoted, and so on through the list—a most violent disturbance of our commissioned personnel. Under any circumstances at least 1,280 of the above 3,108 must be actually eliminated from the active list, the remaining 627 of the total of 1,907 who must be eliminated being staff officers, as shown below:

	Present number.	Reduced number.	Number to be eliminated by July 1, 1922.
Medical Corps.....	1,141	825	316
Medical Administration Corps.....	138	63	75
Dental Corps.....	236	126	110
Veterinary Corps.....	161	109	52
Chaplains.....	179	105	74
Total.....	1,855	1,228	627

This reduction must be entirely eliminated, as demotion is not possible under the present promotion law for these officers.

1. The appropriation act makes no provision for a new distribution of the proposed 11,000 officers to branches of the service. It makes compliance with existing law impossible but provides no substitute.

2. It does not clear up the situation as to rapid promotion. Recent promotions have been based upon interpretation of existing law in the same manner that it has been interpreted ever since we had promotion by selection. Should first lieutenants decline to accept recommissions as second lieutenants—a very likely contingency—there will be the same condition as now exists; that is, promotion to the grade of first lieutenant as soon as appointed a second lieutenant. The Secretary of War has clearly stated that he interprets the law to require promotions to be made when a vacancy exists.

3. The new authorized numbers are not effective until July 1, 1922. The act does not stop promotions in the meantime, nor does it clear up questions as to rights to promotion and pay for vacancies occur-

ring in the meantime. It leaves a broad twilight zone subject to most difficult legal interpretation and adjudication.

Senator HARRIS. General, I would like to ask you about the first and second lieutenant vacancies. If you can do without those men, would it not be better to wait and get graduates from the Military Academy for those vacancies?

General PERSHING. Well, it would take a long time to do that. Senator. It would be very advantageous if it is at all practicable to do it.

Senator HARRIS. Do you think it would be worth while to graduate these classes ahead of time, say graduate this fall the class that would normally graduate next year in June and hurry up the classes of next year?

General PERSHING. No; I am decidedly opposed to that. I would not undertake to do that at all. Even in the emergency of war I would not do it.

Senator HARRIS. What about the graduates in the Naval Academy this year that will not be needed for the Navy?

General PERSHING. I think we ought to find some excellent material there.

Senator WADSWORTH. If it is decided not to commission the graduates?

General PERSHING. Yes; if it is decided not to commission that class.

Senator WADSWORTH. Of course, that has not yet been decided?

General PERSHING. No.

Senator HARRIS. Would it not be well to give those naval graduates three or four months in West Point before commissioning them in the Army?

General PERSHING. I do not know that it would be quite practical to put them into West Point, but they ought to have immediate service in the special schools pertaining to the Army, to which they might be assigned.

Senator HARRIS. I was wondering whether after they graduate in June they could go to West Point in the summer for a special three months' training while some of the class is away on leave.

General PERSHING. I could see no serious objection to that. We have been sending the corps cadets for the last three or four years to camp. They have gone to Camp Dix. Of course, Camp Dix probably will not be available this summer, and we are making plans to send them to camp somewhere, perhaps in the vicinity of West Point, and it might be possible to send some of those men, if any should be assigned to the Army, for a couple of months' training there, but I should think it would be much preferable to let them go to the special training schools outright.

Senator SUTHERLAND. Camp Benning and similar schools?

General PERSHING. Yes.

Senator WADSWORTH. At most you can not hope for more than 130 to 150 graduates from West Point each year, can you?

General PERSHING. Not from the present size of West Point.

Senator HARRIS. I have the figures here—220 this year, 260 next year, and 400 next year.

Senator SPENCER. That is, if they stay in.

Senator HARRIS. They are making allowance for those.

General PERSHING. With the present size, 1,300 cadets, naturally, the classes would be larger than they have been in the past, but it is difficult to make any very accurate estimate of it.

Senator HARRIS. There are two young men from my State at the Naval Academy who are willing to go in the Army if they can not stay in the Navy, and would prefer that to going into civil life. I think there are a number who feel that way.

General PERSHING. Well, I think they should be rather glad to do it, and we would be very glad to have them.

Senator WADSWORTH. Have you any questions?

Senator SUTHERLAND. They would be very useful later on in the event of trouble if we should have to maintain a transport service.

General PERSHING. Yes.

Senator SUTHERLAND. For which, of course, they have had special training.

General PERSHING. Yes. If that is all along this line, I have one thing more, Senator, and I shall have to refer to the finance officer as to the details of this. It is a memorandum sent by the commanding general at Fort Leavenworth asking for the reinstatement of an item for the support of children's schools at his post. The item is for \$10,800.

Senator SPENCER. Do you know what page that is on, General Lord?

General PERSHING. I am not entirely familiar with the details of the original estimate on that. I understand that Mr. Anthony is in favor of its reinstatement.

Senator WADSWORTH. It is not in the House bill.

General LORD. I do not think it was in the bill.

Senator WADSWORTH. Is it in the Budget now?

General PERSHING. I do not know about that.

General LORD. I think not.

General PERSHING. The statement is made here by the general that Senator Curtis and Mr. Anthony are both very anxious to have this thing in and so is the commanding general. I submit it to you for what it is worth.

Senator WADSWORTH. That matter was brought up when the ordnance people appeared before us. There was an item for schools at ordnance depots and one or two instances were cited showing the need of schools, and members of the committee raised the question as to the general policy of supporting schools at the Army posts as well as at the ordnance depots. Of course, the ordnance officers were not competent to talk about it, as they merely wanted a school for one of their depots. There are no appropriations in this bill for schools except for ordnance.

General LORD. The State of Kansas has heretofore maintained a school at Fort Leavenworth, but I think there is some doubt about that continuing, and I think there is a real need for one. If the committee would like, I will look that matter over and submit it to the Budget and see if they will approve of an appropriation for that purpose.

Senator WADSWORTH. We should have to have a Budget estimate, of course, before we could discuss it with members of the department.

General PERSHING. That is all I want.

Senator WADSWORTH. Are there any more questions you would like to ask General Pershing?

Very much obliged to you, General.

(Whereupon the committee adjourned to Thursday, April 27, 1922, at 10.30 o'clock a. m.)

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